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**The Determinants and Consequences of Big 4 Lobbying Positions on  
Proposed Accounting Standards**

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Proposed Accounting Standards**

**by**

**Brian Robert Monsen**

**Dissertation**

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

**Doctor of Philosophy**

**The University of Texas at Austin**

**December 2018**

## **Dedication**

To Shelley, Thaddeus, Wesley, and Evelyn

## **Acknowledgements**

I greatly appreciate the thoughtful comments and guidance of my dissertation committee: Dain Donelson, Ross Jennings, John McInnis (chair), Timothy Werner, and Yong Yu. I am grateful to Abigail Allen, Nick Cappiello, Shuping Chen, Skylar Deture, Rachel Geoffroy, Michael Gonzales, Jeff Johanns, Steve Kachelmeier, Antonis Kartapanis, Tom Linsmeier, Rick Mergenthaler, Lil Mills, Jaime Schmidt, Sara Toynbee, Kristen Valentine, Ben Van Landuyt, Terry Warfield, Dan Wangerin, Brady Williams, Chris Yust, and workshop participants at Indiana University, The Ohio State University, The University of Texas, and The University of Wisconsin for helpful comments. I thank Jesse Chan and Ryan Hess for outstanding research assistance, and I gratefully acknowledge funding from the Deloitte Foundation Doctoral Fellowship, the McCombs School of Business, and The University of Texas Graduate School.

I express sincere appreciation to members of my dissertation committee for patience and mentorship that extended well beyond the development of this dissertation. Jef Doyle and Larry Walther are due special thanks for providing both a model and the encouragement to get started. Finally, none of this would have been possible without the love and support of my wife Shelley and my children Thad, Wes, and Eve.

## **Abstract**

### **The Determinants and Consequences of Big 4 Lobbying Positions on Proposed Accounting Standards**

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Despite the considerable participation of Big 4 accounting firms in accounting standard setting, no studies provide systematic evidence on what factors shape Big 4 lobbying positions or whether their positions materially influence standards. Using textual analysis of comment letters to measure lobbying positions on FASB exposure drafts, I seek to provide such evidence. I find that Big 4 lobbying positions reflect incentives to increase fee-generating work and maintain client relationships, and that Big 4 support for fee-increasing proposals is constrained by client opposition. Big 4 lobbying positions are significantly associated with standard setting outcomes, both in isolation as well as relative to other FASB constituents, including financial statement preparers and users. My results indicate financial statement users are neither directly (via comment letter lobbying) nor indirectly (via Big 4 advocacy) influential in the comment letter phase of FASB due process.

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## **Chapter 1: Introduction**

The mission of the Financial Accounting Standards Board (FASB) is “to provide useful information to investors and other users of financial reports” (FAF 2013). Despite the primacy of users in its mission, FASB due process is dominated by the four largest global accounting firms: Deloitte, EY, KPMG, and PwC (Big 4). Big 4 representatives serve on FASB advisory groups and project working groups, work as FASB staff in residence, and even oversee FASB governance as trustees of the Financial Accounting Foundation (FAF). In addition, multiple FASB Board members are retired Big 4 partners and many of the FASB staff worked for Big 4 firms prior to joining the FASB.

This high level of participation stems from two sources. First, engaging in the standard setting process provides Big 4 firms with substantial benefits at relatively low cost when compared to other FASB constituents. Operating in what Ramanna (2015) describes as a thin political market, the Big 4 have a concentrated commercial interest in accounting standards, which facilitates participation and coordination, while other constituents (particularly users) face relatively higher participation costs and more diffuse benefits. Second, seeking and incorporating Big 4 advice is an efficient response by FASB staff and Board members who require expertise and information in order to create effective policy (e.g., Calvert 1985; Austen-Smith and Wright 1992; Jiang, Wang, and Wangerin 2018). Because Big 4 firms both opine and consult on the accounting of the world’s largest companies, they are uniquely positioned to provide timely, relevant advice on the development and application of accounting standards.

Notwithstanding Big 4 firms' significant participation in FASB standard setting processes and operations, there is no systematic evidence on: 1) the incentives that shape Big 4 lobbying positions on proposed FASB standards (exposure drafts) or 2) whether Big 4 lobbying positions materially influence standard setting outcomes. This study seeks to provide answers to these two questions. By lobbying position I refer to the broad opinion of support vs. opposition expressed by FASB constituents on FASB proposals, rather than more specific preferences that are sometimes offered in lobbying documents (i.e., preferences for relevance over reliability or simplicity over complexity).

Providing such evidence is important for several reasons. First, economic theory suggests that regulations are influenced by those who stand to benefit most from them, and that regulators may rationally select biased lobbying advice (e.g., Stigler 1971; Calvert 1985). Accordingly, understanding Big 4 lobbying motivations and influence sheds light on the development of U.S. Generally Accepted Accounting Principles (GAAP), and answers Leuz and Wysocki's (2016) call for evidence on "the process by which disclosure and reporting regulation arises."

Second, prior research provides limited and often conflicting evidence regarding the role of Big 4 firms in standard setting. Previous studies rely on researchers' subjective assessments of support or opposition toward proposals (e.g., Puro 1984; MacArthur 1988; McKee, Williams, and Frazier 1991), or focus on auditor positions on a single qualitative accounting characteristic (e.g., Allen, Ramanna, and Roychowdhury 2018; Baudot, Huang, and Demek 2018). By analyzing multiple economic motivations both individually and in combination on a large sample of exposure drafts issued over several years, this study

provides evidence on what drives Big 4 lobbying more broadly and how different incentives interact.

Third, while Big 4 firms have the potential for significant influence, the FASB's primary constituent is financial statement users (FASB 2010). However, users have a notoriously low rate of participation in standard setting (e.g., Weetman, Davie, and Collins 1996), leading some to question the extent of their influence in accounting rulemaking (e.g. Young 2006). Examining Big 4 incentives and lobbying positions relative to those of users sheds light on whether Big 4 firms lobbying positions correspond to the FASB's mission. Finally, my study is the first of which I am aware to systematically examine the standard setting consequences of comment letter lobbying, which I analyze for Big 4 firms in isolation as well as relative to other constituents. Broad evidence on how comment letter lobbying impacts standard setting outcomes is informative about the effectiveness of FASB due process.

I develop and test three competing, yet non-mutually exclusive, theories identified from prior accounting, economics, and political science research to examine whether theorized motivations affect Big 4 positions generally, whether one dominates, and how the incentives interact. I outline the three theories—the make-work theory, the client theory, and the user theory—below.

The *make-work theory* predicts Big 4 firms support exposure drafts that would, if adopted, increase demand for audit and consulting services from more firms, because such standards lead directly to higher fees (e.g., Watts and Zimmerman 1982; Puro 1984). The *client theory* predicts Big 4 firms support standards preferred by clients. As agents of audit

clients, Big 4 firms may favor standards that benefit clients because such benefits are passed on through maintained client relationships and reduced risk of auditor switches (e.g., Jensen and Meckling 1976; Watts and Zimmerman 1986). Finally, the *user theory* predicts Big 4 firms aim to enhance capital market efficiency by supporting standards that provide users with the best information for decision-making, consistent with regulators' statements on the role of auditors as gatekeepers of capital market integrity (e.g., White 2015; Harris 2016).

To test these three theories, I develop proxies to measure whether: 1) exposure drafts will likely increase demand for Big 4 services (make-work theory), 2) Big 4 clients support the exposure draft (client theory), and 3) financial statement users support the exposure draft (user theory). I then examine how Big 4 lobbying positions vary with these proxies. I measure lobbying positions of Big 4 firms, as well as those of clients, users, and other constituents, as the tone of comment letters submitted in response to FASB exposure drafts. Tone is computed using positive and negative words from the Loughran and McDonald (2014—LM) dictionary, with more positive (negative) tone indicating relatively more (less) support. While prior studies rely on researchers' subjective assessments of constituent support or opposition toward a proposal, tone is more transparent, objective, and scalable, and can be consistently applied across exposure drafts and comment letters. I contextually modify the dictionary by removing standard- and proposal-specific accounting words, and additionally perform several tests to ensure construct validity.

I first examine the extent to which the three theories outlined above influence Big 4 lobbying positions. I find that Big 4 comment letter tone is positively associated with

proposed expansions of work-increasing elements in FASB exposure drafts. Work-increasing elements are proposed changes to implementation guidance, weighted by the proportion of firms that would be affected by the exposure draft. The FASB (2002) and SEC (2003) indicate implementation guidance increases the complexity of GAAP, and research suggests interpretive guidance is associated with greater difficulty of application and more audit work (e.g., Donelson, Folsom, McNinnis, Mergenthaler, and Peterson 2016). This evidence supports the make-work theory. I also find a positive association between the tone of Big 4 comment letters and the average tone of their clients' comment letters on the same exposure draft, supporting the client theory. Finally, I find no association between Big 4 comment letter tone and the average tone of users, suggesting Big 4 lobbying positions are not associated with capital market views.

Evidence from a joint test combining all theory variables indicates support of similar economic and statistical magnitudes for both the make-work and client theories. I further explore the interaction of these two incentives and find that the positive relation between work-increasing exposure drafts and Big 4 comment letter tone is concentrated in exposure drafts for which client support is high. In other words, the evidence suggests that Big 4 support for work-increasing standards is constrained by client opposition. Results of supplemental tests suggest litigation risk does not explain Big 4 support for work-increasing standards.

I next examine how Big 4 positions affect standard setting outcomes. Reliance on experts is an important component of FASB due process (Jiang et al. 2018). Although Big 4 firms likely have the most experience in any standard setting application, the economic

incentives and lobbying behavior of other constituents could either mask or constrain their influence on final accounting standards. For example, the FASB's conceptual framework explains the objective of general purpose financial reporting is to provide information "that is useful to existing and potential investors, lenders, and other creditors in making decisions" (FASB 2010), suggesting user positions arguably *should* drive changes in accounting standards. On the other hand, since preparers arguably face the most asymmetric cost function with respect to changes in accounting standards, they are the loudest voice and may thus drive GAAP changes (e.g., McKay and Yackee 2007).

To test the absolute and relative influence of Big 4 lobbying positions on standard setting outcomes, I construct three measures to capture FASB responses to constituent lobbying: 1) the magnitude of content changes from exposure draft to final standard using textual similarity of the two documents (e.g., Haeder and Yackee 2015; Lang and Stice-Lawrence 2015); 2) whether a project "fails" (i.e., is removed from the FASB agenda following the comment letter period); and 3) the time between exposure draft and final standard issuance. I then estimate the association between these outcome measures and the average tone of comment letters from each major FASB constituent group.

I find a significantly negative association between average Big 4 comment letter tone and content changes from the exposure draft to the final standard, suggesting that when Big 4 firms support (oppose) an exposure draft, the FASB generally makes fewer (more) changes to the standard. Big 4 tone is also significantly negatively associated with project failure, indicating Big 4 opposition is a factor in FASB decisions to abandon agenda projects. Finally, I find a significantly negative association between Big 4 tone and time

from exposure draft to final standard, suggesting Big 4 opposition is associated with meaningful delays in final standard issuance. In terms of relative influence, average Big 4 tone is more strongly associated with standard setting outcomes than comment letter tone of other constituent groups, including users and other auditors, except for in tests of delay, where average preparer tone weakly dominates. Collectively, tests of standard setting outcomes suggest Big 4 firms' lobbying positions have a statistically strong correspondence with meaningful FASB consequences, and this correspondence is stronger relative to the lobbying positions of other constituents. I find no relation between user tone and outcomes in any of my tests, suggesting user comment letter views are not a significant input in developing final accounting standards.

This study contributes to the literature on the political process underlying accounting standards development in two primary ways. First, by examining comment letters on 80 exposure drafts issued over 15 years, I provide broad evidence that Big 4 firms' positions are associated with both their incentive to increase the amount of audit and consulting work they provide and agreeing with client positions, with client positions apparently constraining Big 4 support for work-increasing proposals.

Second, I provide the first systematic evidence on the influence of various FASB constituent groups on standard setting outcomes. My results indicate Big 4 firm lobbying positions are significantly associated with the amount and timing of change in FASB standards and the likelihood of a FASB project failing, and are generally more strongly related to outcomes relative to lobbying positions of other constituents. One notable finding is that, contrary to the conceptual preeminence of users in the FASB mission, I observe no



evidence that financial statement users' views directly relate to standard setting outcomes or that user views are incorporated into Big 4 lobbying positions. These results have implications for standard setters who must incorporate Big 4 lobbying input in developing accounting standards, as well as for academics and financial statement users seeking to understand the process by which financial reporting regulation arises.

## **Chapter 2: Background and Prior Literature**

### **2.1. Background**

The Securities Exchange Act of 1934 gave the Securities and Exchange Commission (SEC) legal authority to establish financial accounting standards in the U.S. However, the SEC has historically delegated this accounting rulemaking authority to the private sector. Prior to the FASB, authoritative accounting standards were issued by the Accounting Principles Board (APB), a committee formed and overseen by the American Institute of Certified Public Accountants (AICPA), a professional organization of practicing public accountants.<sup>1</sup> Membership in and control of the APB was dominated by representatives from the large audit firms (then the “Big 8”), with additional membership usually from smaller audit firms and business executives (Sprouse and Vagts 1965; Zeff 2007a). Only one professional financial statement user ever served on the APB, and he joined in 1971, two years before the APB was dissolved (Zeff 2007a).<sup>2</sup>

Through the 1960s and into the 1970s the APB experienced a “crisis of confidence” (Zeff 2015), wherein the SEC increasingly intervened in APB rulemaking to correct deficiencies in existing rules or APB proposals, generally on behalf of financial statement users and the public interest (Zeff 2007b; 2018). In 1971 the AICPA addressed the growing tension between the SEC and the accounting profession by appointing the Wheat

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<sup>1</sup> The Committee on Accounting Procedure (CAP) set accounting standards until the establishment of the APB in 1959. In the case of the CAP, the founding and initial oversight organization was the American Institute of Accountants (AIA), the immediate predecessor of the AICPA.

<sup>2</sup> The absence of financial statement users on the APB was likely partly due to the requirement that APB members be Certified Public Accountants (CPAs), a designation required only for licensed public accounting practitioners (i.e., generally auditors or tax professionals).

Commission on Establishment of Accounting Principles (Wheat Study) to recommend alternative models for the development of financial accounting standards (Establishing Financial Accounting Standards 1972). The Wheat Study considered suggestions ranging from de-privatization of standard setting to slight modifications of the extant APB structure.

The Wheat Study recommendations ultimately led to the establishment of the FASB in 1973 as a private organization with authority to promulgate GAAP. The FAF was concurrently established to oversee the FASB's administration, finances, and membership.<sup>3</sup> Relative to earlier standard setting bodies with inherent practitioner-driven objectives, the FASB has historically maintained a more diverse representation and a distinct focus on how financial reporting information is used. As an example, its mission statement describes the FASB purpose "to establish and improve financial accounting and reporting standards to provide useful information to investors and other users of financial reports..." (FAF 2013).

The institutions surrounding accounting standard setting have changed considerably since the founding of the FASB. The large accounting firms were reduced in number from eight in 1973, to six in 1990, to five in 1999 and, finally, to four in 2002 (Allen et al. 2018). This concentration was facilitated by both merger and acquisition activity within the group, as well as the collapse of Arthur Andersen in 2002 resulting from

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<sup>3</sup> The Wheat Study recommendation gave substantial power to the AICPA to select FAF trustees, likely to avoid alienating the AICPA after removing its standard-setting authority (Zeff 2015). For example, the initial nine-member board of FAF trustees consisted of the AICPA president and four practicing CPAs, thus securing a majority of trustee votes for the profession. FAF membership requirements have changed substantially over time.

its association with the Enron scandal. This concentration has likely led to Big 4 incentives with regard to standard setting becoming starker. Over the same time period, financial statement users have come to expect financial reporting of greater volume and frequency (e.g. Li 2008; Lang and Stice-Lawrence 2015; McMullin, Miller, and Twedt 2018).

The high level of participation of Big 4 firms in standard setting activities suggests the concentration of large auditors has outweighed any impact of changing user expectations on FASB technical operations. Despite the primacy of financial statement users in its mission, FASB due process is dominated by the Big 4 firms. Senior partners of Big 4 firms serve on FASB advisory groups and frequently work for the FASB as rotational staff (FASB n.d.). Through their participation in the Emerging Issues Task Force (EITF), senior Big 4 partners develop accounting guidance that, if ratified by the FASB Board, is codified as US GAAP. They also provide oversight, with at least one FAF trustee selected from a global leadership position in a Big 4 firm.<sup>4</sup> Additionally, at least two members of the FASB board are usually retired Big 4 partners and many of the FASB technical staff were employed by Big 4 firms prior to joining the FASB.

This procedural dominance likely stems from two sources. First, from the perspective of the Big 4, participation in the standard setting process provides significant potential benefits at relatively low cost. The Big 4 thus benefit from a collective action problem whereby their concentrated commercial interest in accounting standards facilitates

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<sup>4</sup> Although not a formal requirement, a representative from at least one of the Big 4 firms with the title of Chairman and/or Chief Executive Officer has served as a member of the FAF since at least 2000, the date at which annual reports are available on the FAF website.

coordination and participation, while other constituents (particularly users) face relatively higher participation costs and more diffuse benefits (Ramanna 2015). Second, from the FASB's perspective, seeking and incorporating Big 4 advice is a predictable and rational response to a need for expertise (Calvert 1985; Austen-Smith and Wright 1992; Jiang et al. 2018). Because Big 4 firms both opine and consult on the accounting practices of the world's largest companies, they are uniquely positioned to provide timely, relevant advice on the development and application of accounting standards.

## **2.2. FASB Rulemaking Process**

The rulemaking process at the FASB relies heavily on constituent input.<sup>5</sup> The typical life cycle of a FASB standard-setting project begins with a research phase wherein the FASB works with constituents (often facilitated by its advisory groups) to identify deficiencies in GAAP. If the FASB Board determines that correcting an identified deficiency is likely to provide sufficient benefit at sufficiently low cost, the Board adds a project to its technical agenda. The FASB staff then researches the agenda issue, incorporating formal discussions with project-specific working groups as well as informal discussions with subject matter experts in the field, in order to propose alternative accounting treatments to the FASB Board.

Once FASB members have voted on available alternatives, the FASB staff compiles the preliminary decisions into an exposure draft formally soliciting written

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<sup>5</sup> See the FASB Rules of Procedure (FAF 2013) for detailed requirements of FASB due process and Miller, Bahnson, and Redding (2016) for a broader discussion of the topic.

comments from constituents.<sup>6</sup> The time between exposure draft issuance and comment letter due date can be 25 days or less for narrow amendments or 60 days or more for more significant amendments to GAAP.<sup>7</sup> After the comment period, the FASB Board conducts additional deliberations and issues a final standard. Prior to the introduction of the Accounting Standards Codification (ASC) in 2009, this process resulted in the issuance of final accounting standards in the form of a Statement of Financial Accounting Standards (SFAS), FASB Interpretation (FINs), or FASB Staff Position (FSP). Sometimes Technical Bulletins (TBs), which carried lesser authority in the case of conflicting guidance, were issued. The EITF also issued “consensuses” with lesser GAAP authority than TBs.

In 2009 all authoritative GAAP guidance was consolidated into the ASC. All final standards issued by the FASB are Accounting Standards Updates (ASUs) that amend the ASC. The FASB explains “An Update is not itself authoritative; rather, it is a document that explains how the [ASC] has been amended” (FAF 2013). All ASUs have equal authority and there are no longer distinctions between usual due process standards such as SFASs and staff-initiated standards like FSPs. Additionally, the EITF still deliberates and comes to consensuses on emerging accounting issues, but their consensuses are now issued as ASUs with the same weight and authority as other ASUs. Despite their different authoritative weight and underlying process relative to SFASs, the FASB conducts the

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<sup>6</sup> FASB due process rules require issuing an exposure draft before a final standard, but other documents are occasionally issued if the FASB deems additional constituent input necessary.

<sup>7</sup> The FASB appears to generally be on the side of longer comment periods—the mean (median) comment period for the 80 exposure drafts in my sample is 76 (67) days.

same amount of both formal and informal constituent outreach under the ASC regime. For convenience, I refer to ASUs as final standards throughout the study.<sup>8</sup>

This paper focuses on the comment letter period between exposure draft and final standard, as this is the only publicly observable portion of FASB due process. However, Big 4 involvement is pervasive and dominant throughout the standard-setting process.<sup>9</sup> Understanding the motivations that shape Big 4 firms' lobbying positions in comment letters is thus informative for understanding FASB decision-making more broadly. It is also important from a historical context to determine whether the public-interest emphasis on which the FASB was founded guides accounting standard development. If, on the contrary, FASB rules are determined by the accounting profession with little regard for interests of investors and other financial statement users, the implication may be that the APB model of public accountant reliance has continued through the FASB era.

### **2.3. Prior Literature**

Researchers have applied several different policy-making models to understand FASB standard setting (see Gipper et al. 2013 for a review). Some suggest the FASB follows a public interest model (e.g., Posner 1974) and makes decisions to maximize social welfare, consistent with the premise on which the FASB was founded.<sup>10</sup> Others argue the

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<sup>8</sup> Because the ASC organization precludes simple categorization of standards based on authority, I make several adjustments to the post-ASC sample based on project origination and purpose. This is explained in detail in Section 5.1.

<sup>9</sup> My inability to observe Big 4 firms' "quiet" lobbying efforts both before and after the public exposure period likely leads to my underestimating the impact of Big 4 firms on the standard setting process.

<sup>10</sup> Consistent with the discussion in Sunder (1988), Gipper et al. (2013), and Ramanna (2015), it is difficult for the FASB to know which rules maximize welfare and what frictions prevent market forces from achieving it without FASB intervention.

FASB is captured by firms or individuals directing accounting rules for their own interests (e.g., Ramanna 2015). Ball (2009) argues market-based solutions were effective until the SEC and FASB began promulgating rules-based and compliance-centric GAAP. FASB members' actions are also potentially guided by personal ideologies (i.e., conservative or pro-fair value), so that GAAP is a product of the ideological composition of the FASB (Allen and Ramanna 2013).

Regardless of the policy lens adopted, the FASB is subject to market demands and influential constituents. While many raise alarms about the adverse consequences of special interest influence (e.g., Ramanna 2008, 2015; Zeff 2002, 2005), another view suggests FASB interactions with prominent constituents reflects the importance of expertise and information (e.g., Jiang et al. 2018).

Big 4 firms dominate constituent participation in FASB processes prior to exposure draft issuance (Gipper et al. 2013). For example, agenda priorities of the FASB are set by advisory groups on which Big 4 firms play important roles and by Big 4 firms themselves (Leftwich 1995; Allen 2014; Jiang et al. 2018). Most prior research on FASB lobbying is in the comment letter phase, and typically focuses on preparers' incentives relative to a particular proposed standard (e.g., Dechow, Hutton, and Sloan 1996; Yen, Hirst, and Hopkins 2007; Ramanna 2008; Hodder and Hopkins 2014).

Brown (1981) was the first study to systematically identify positions and preferences of various constituents interacting with the FASB. Brown's study was novel in many ways, including: the use of discussion memoranda (as opposed to exposure drafts) as neutral documents to analyze constituents' "unbiased" preferences; the explicit



consideration of multidimensionality in constituents' policy preferences;<sup>11</sup> and a novel methodology to measure constituent and FASB position. Perhaps the most important innovation in Brown (1981) is his use of changes from discussion memorandum to final standard as a measure of changes in FASB internal positions or decision-making. The present study is in many ways an extension of Brown's analysis. For example, I examine the multidimensional nature of the lobbying incentives of Big 4 firms, and use textual changes from exposure to final standard to capture changes in FASB position. However, this study differs from Brown (1981) in its focus on various incentives of Big 4 firms as the dominant constituent group, as well as its explicit comparison of Big 4 positions' associations with meaningful standard setting outcomes relative to the positions of other constituent groups.

Although this study focuses on incentives of Big 4 firms (i.e., as distinct from auditors more generally), the prior literature on auditor lobbying on proposed accounting standards is most closely aligned with this study. However, as noted by Gipper et al. (2013), research in this area is scarce and often yields conflicting conclusions. Prior research on auditor lobbying is mainly interested in auditor-client agreement on FASB proposed standards. Haring (1979) hypothesizes a positive relation between client and auditor preferences, but finds no significant association in a sample of seven proposals. He concludes concerns about auditor independence in influencing regulation (e.g., Metcalf

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<sup>11</sup> The lack of user participation in FASB due process is apparent at the time of Brown's study as well, with only one of the 27 respondents with sufficient participation to be included in the study representing user interests.

Report-US Congress 1976) are exaggerated. MacArthur (1988) hypothesizes a similar relationship, but fails to detect an association. In a SFAS 86 case study, McKee, Williams and Frazier (1991) find an association between client and auditor views, but only when clients are experienced lobbyists.

Watts and Zimmerman (1982) analyze auditor lobbying on six proposed standards and find results suggesting that while auditors generally lobby consistent with client interests, auditor incentives for more fees is also associated with lobbying positions. They find support for both incentives. Puro (1984) finds similar results, also in a small sample of six proposals. Due to their research designs, neither Watts and Zimmerman nor Puro distinguish whether self-interest or client-facing incentives are dominant. Moreover, due to the use of small, non-overlapping samples, prior results are context-specific and thus may not generalize or distinguish between auditors' self-interest and client-facing incentives.

I am aware of three studies examining Big 4 (or Big "N" for earlier periods) comment letter lobbying explicitly. First, Puro (1985) tabulates within-group agreement among Big 4 firms using data from Puro (1984), and finds no evidence of collusion. Allen et al. (2018) conduct a longitudinal study of Big 4 lobbying for relevance vs. reliability in a large sample of exposure drafts issued over many years. They find that heightened litigation risk over time and increasing agreement with standard setters' fair value preferences are associated with comment letter mentions of reliability, but client preferences are not. In a recent study, Baudot et al. (2018) qualitatively examine Big 4 comment letters as a way to contextualize accounting complexity. They conclude that Big

4 firms discuss complexity in many different ways and in most of their comment letters. They additionally find Big 4 firms oppose FASB proposals that increase complexity, but do not reconcile this result to prior literature (Watts and Zimmerman 1982; Puro 1984).<sup>12</sup>

Research on the outcomes of standard setting lobbying is even sparser. Buckmaster et al. (1994) find no association between lobbying positions of multiple constituents and outcomes of seven exposure drafts—a result they acknowledge could be due to insurmountable research design issues. Hansen (2011) finds in a sample of five due process documents that lobbying success before the IASB depends on lobbyist expertise, credibility, and financial contributions to the IASB. And McLeay et al. (2000) find preparer dominance in the implementation of a European financial reporting directive into German law.

This study differs from and complements prior work in several ways. First, whereas prior research focuses on either issue-specific lobbying on a small number of proposals (e.g., Puro 1984; McKee et al. 1991) or time-series variation along a single conceptual dimension of accounting (Allen et al. 2018), my empirical approach incorporates all significant exposure drafts over the entire sample period of 2002 to 2016 to be broadly informative on the determinants of Big 4 accounting firm support or opposition. Second, rather than categorizing firm comments as “for” or “against,” my analysis of letters’ textual features captures variation in Big 4 firms’ views and thus has the potential to provide a

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<sup>12</sup> Complexity in Baudot et al. (2018) is conceptually similar to this study’s make-work theory. However, significant differences in how each study operationalizes this construct make comparisons difficult. Whereas Baudot et al. define complexity using Big 4 comments and do not consider the proposed standards’ impact, I define complexity using characteristics of the exposure draft and weight each exposure draft observation by the breadth of its expected impact on public companies using data from Compustat.

more nuanced understanding of their lobbying positions. And finally, to my knowledge this is the first study providing systematic evidence on the standard setting outcomes of lobbying by Big 4 firms, both in absolute terms as well as relative to other constituent groups.

## **Chapter 3: Hypothesis Development**

### **3.1. Determinants of Big 4 Lobbying Positions**

Big 4 accounting firms are complex, global organizations facing multiple incentives when lobbying on proposed accounting standards. The influence of a single incentive is unlikely to be evident in a comment letter without simultaneous evidence of other motivations. Nonetheless, aggregation of different incentives into broad categories that align with potential motivations is useful for testing the existence and relative importance of the different incentives. I classify incentives of Big 4 firms to take lobbying positions before the FASB into three competing, non-mutually exclusive theories. These theories are competing in the sense that the null hypothesis underlying each theory is based both on theory-specific considerations and importantly on the other two theories' alternative hypotheses. They are non-mutually exclusive in the sense that each motivation is inherently based on Big 4 firms' profit motive, and each theory describes a different channel for increasing or maintaining profits.

#### **3.1.1. Make-work Theory**

Since Big 4 firms' chief revenue source is audit fees from opining on clients' application of GAAP, it follows that they are motivated to influence GAAP to increase audit fees. Big 4 firms also have large and growing consulting practices (Financial Times 2015; Deloitte 2016; EY 2016; KPMG 2016; PWC 2016), which similarly affects incentives to shape GAAP to increase demand for professional services. Big 4 firms stand to benefit from regulatory and accounting standard developments in particular in the U.S. where, despite independence rules ushered in by Sarbanes-Oxley, public companies rely

heavily on their auditors for assistance in implementing new rules (McKenna 2017). This is consistent with rent-seeking behavior by those standing to benefit from regulation (Stigler 1971). Increased fees are most likely when amendments to GAAP are difficult to apply (Watts and Zimmerman 1982). Application difficulty also represents a barrier to entry for smaller competitors.

Exposure drafts outline how existing guidance will be amended if the exposure draft's provisions are adopted as a final standard. If application is expected to be sufficiently difficult, exposure drafts propose providing implementation guidance, which details how to account for an item, as well as examples of application. I assume changes to implementation guidance are indicative of both the existence of a change in what firms are required to do, as well as the difficulty of applying the change. This is consistent with regulatory statements that implementation guidance indicates complexity (FASB 2002; SEC 2003) and with empirical evidence in Donelson et al. (2016) showing an association between audit fees and interpretive guidance.<sup>13</sup>

Big 4 firms may additionally want to increase complexity as a shield from litigation risk. For example, Allen et al. (2018) find an association between temporal changes in auditor litigation and Big 4 lobbying for reliability, and Donelson, McInnis, and Mergenthaler (2012) find that rules-based standards (which are partly defined by high levels of implementation guidance) are associated with lower incidence of shareholder

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<sup>13</sup> I confirm that implementation guidance changes are associated with increased audit fees in a supplemental test described in Section 5.1.1.

litigation. I attempt to distinguish between work-increasing and litigation-decreasing incentives in Section 5.5.2.

### **3.1.2. Client Theory**

Under an agency view of the relationship between Big 4 firms and their audit clients, managers may influence their auditors' lobbying positions on proposed GAAP amendments through their power to hire and fire them. Thus, Big 4 firms may lobby for standards that benefit clients because this likely helps build and maintain client relationships and reduce the risk of auditor switches. Moreover, due to growth in Big 4 firms' consulting practices, this incentive likely extends beyond audit clients and thus also predicts that Big 4 firms side with large preparers that are either current or potential consulting clients. This incentive has received most of the attention of prior auditor lobbying research, which was largely concerned with a perceived auditor independence problem (e.g., Haring 1979; Watts and Zimmerman 1982; MacArthur 1988; McKee et al. 1991). Results of prior research are also mixed, with no clear answer on whether auditor and client lobbying positions align.

### **3.1.3. User Theory**

As gatekeepers of capital market integrity (e.g., White 2015; Harris 2016), Big 4 firms may support accounting standards leading to financial statements that better reflect firms' underlying economics. This is consistent with Big 4 firms supporting the FASB's mission of promulgating financial accounting standards that increase the decision usefulness of accounting information. Under this view, accounting standards that lead to less informative financial reports could decrease demand for audit and consulting services

by reducing the value of an audit and of compliance with GAAP. On the other hand, if GAAP is viewed as leading to more informative financial reports, the value of audit and consulting services that encourage compliance with GAAP will increase. All else equal, Big 4 firms should prefer more informative standards because adopting such standards increases or maintains demand for audit and consulting services and thus benefits the profession.

This view is expressed in some Big 4 firm comment letters' mentions of the anticipated impact of adopting an exposure draft on financial statement users. In a recent example, Deloitte commented that "the classification of deferred taxes under existing GAAP does not provide useful information to users..." (Deloitte 2015). Similar references to the impact on financial statement users are common in Big 4 comment letters.

Three hypotheses, stated in the null, emerge from the discussion in Sections 3.1.1 through 3.1.3 on the determinants of Big 4 lobbying positions:

*H1: Big 4 accounting firms do not lobby in support of proposals that will increase demand for audit and consulting services.*

*H2: Big 4 accounting firms do not lobby in support of proposals supported by their clients.*

*H3: Big 4 accounting firms do not lobby in support of proposals supported by financial statement users.*



### **3.2. Standard Setting Outcomes**

I next form testable hypotheses about the absolute and relative association between Big 4 positions and standard setting outcomes. The FASB's conceptual framework states the objective of general purpose financial reporting is to provide information "that is useful to existing and potential investors, lenders, and other creditors in making decisions" (FASB 2010). The centrality of users is echoed in the FASB's mission statement to "establish and improve standards of financial accounting and reporting that foster financial reporting by nongovernmental entities that provides decision-useful information to investors and other users of financial reports" (FAF 2013). Given the preeminence of financial statement users, user lobbying positions arguably should drive changes in accounting standards.

However, it is possible that financial statement preparers are most influential in steering standard setting activities. Preparers asymmetrically bear observable and quantifiable costs of standard setting, with fewer obvious or easily measurable benefits through, for example, reduced cost of capital. New standards require preparers to update systems, train personnel, and incur audit-related costs. Accordingly, preparers are the most vocal participants in the standard setting process (Hodder and Hopkins 2014). Their comment letters far outnumber those of other individual constituent groups and, consistent with research on regulatory agency lobbying (e.g., McKay and Yackee 2007), greater volume could lead to greater influence.

On the other hand, because FASB board members' individual areas of expertise may collectively lack the breadth or depth required to promulgate effective standards, reliance on experts for information is an important component of FASB due process (Jiang

et al. 2018). Theory suggests that regulators rationally rely on experts' biased advice, even when they are aware of and cannot undo the bias (Calvert 1985; Austen-Smith and Wright 1992). Since their audit and consulting businesses face accounting issues from virtually the entire economy, Big 4 firms are likely the foremost experts on any topic facing the FASB, suggesting their input may be most influential.

Constituent influence in FASB due process is likely to be evident in the extent of changes from exposure draft to final standard, the likelihood of exposure drafts being finalized, and the amount of resources and time required to finalize standards. Given their level of expertise and pervasiveness in FASB operations, I expect Big 4 accounting firms to influence standard setting outcomes and to be more influential relative to other constituent groups. However, these expectations are not tested in prior research and are empirical matters, leading to the below hypotheses, stated in the null:

*H4: Big 4 accounting firm lobbying positions do not influence standard setting outcomes.*

*H5: Relative to lobbying positions of other FASB constituents, Big 4 accounting firm lobbying positions do not have a greater influence on standard setting outcomes.*

## Chapter 4: Empirical Design

### 4.1. Determinants of Big 4 Lobbying Positions

I use comment letters written in response to exposure drafts to measure Big 4 lobbying position for several reasons. First, comment letters are typically the only observable interaction between the FASB and Big 4 firms, and the Big 4 comment on virtually all exposure drafts.<sup>14</sup> Second, the observable nature of comment letters likely precludes Big 4 firms from taking misleading positions in comment letters relative to positions taken privately with the FASB. Finally, prior research concludes comment letters are representative of constituent views (e.g., Kelly 1985; Hodder and Hopkins 2014).

Testing my hypotheses requires a proxy for lobbying positions. Early studies measured position by hand coding letters as supportive or opposed (e.g., Brown 1981; Watts and Zimmerman 1982; Puro 1984, 1985). However, coding comment letters on multiple exposure drafts over many years presents several challenges. First, commenters rarely state unequivocal positions, instead describing nuanced viewpoints on multiple changes proposed by the exposure draft. Second, developing a uniform coding rubric applicable to all exposure drafts is likely not feasible due to significant variation in the number and significance of proposed GAAP amendments in each exposure draft.<sup>15</sup> Finally, hand coding all comment letters required for my analyses is prohibitively costly. While

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<sup>14</sup> I focus on exposure drafts in this study because exposure drafts (as opposed to Discussion Memoranda or Preliminary Views documents) are a) more uniform in their format and solicitation of constituent feedback, and b) more indicative of the FASB's intent to issue a final standard.

<sup>15</sup> This limitation appears to be earlier researchers' motivation for studying small samples of FASB exposure drafts on which a clear support-vs.-oppose dimension could be identified (e.g., Watts and Zimmerman 1982; Puro 1984).

testing H1 requires position measures for 316 Big 4 comment letters, testing H2 and H3 requires scores for 5,228 preparer and 390 user comment letters, and testing H4 and H5 requires scores for 16,994 comment letters.

Given these complexities, I rely on text analysis to measure lobbying positions.<sup>16</sup> My primary measure is *Tone*, defined at the comment letter level, as the number of positive words minus the number of negative words, divided by the sum of positive plus negative words. Positive and negative words are defined using the Loughran and McDonald (2014—LM) dictionary after contextually modifying it by removing standard- and proposal-specific accounting words that are germane to the applicable document, and are not used in order to convey support or opposition.<sup>17</sup> This measure has several advantages over hand coding. First, *Tone* is continuous from -1 to 1, which allows for more variation than dichotomous variables. Second, calculating *Tone* is scalable and can be done easily for all comment letters in my sample. Third, *Tone* can also be computed for exposure drafts to which the comment letters respond, which allows controlling for exposure draft features that could induce spurious correlation between the exposure draft and the comment letter position. As examples, I include two excerpts from Big 4 comment letters in Appendix A.

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<sup>16</sup> Allen et al. (2018) come to a similar conclusion, and rely on counting the number of words before and after the first instance of the word stem *reliab\** to establish their measure of the importance of relevance-reliability tradeoffs.

<sup>17</sup> Specifically, I remove the words “disclose,” “disclosed,” “discloses,” “disclosing,” “defined benefit,” “effective date,” “effective control,” “going concern,” “troubled debt restructuring,” and “loss contingency,” because these terms or words within them convey meaning according to the LM dictionary, but are used in the context of FASB documents and comment letters to describe accounting topics.

Despite these advantages, a concern that a human reader and software could come to opposite conclusions potentially remains. I perform several validation tests to address this concern. These tests are discussed in Appendix B.

To test H1 through H3 I estimate Models (1) through (4) at the comment letter level:

$$\begin{aligned} \text{Big4Tone}_{ij} = & \alpha_0 + \alpha_1 \text{Work}_j + \alpha_2 \text{ExDraftTone}_j + \alpha_3 \text{LnCLWords}_{ij} \\ & + \alpha_4 \text{LnCLCount}_j + \alpha_5 \text{LnExDraftWords}_j + \alpha_6 \text{LnAgendaExDraftDays}_j \\ & + \text{Big 4 FE} + \text{Year FE} + \varepsilon_{ij} \end{aligned} \quad (1)$$

$$\begin{aligned} \text{Big4Tone}_{ij} = & \beta_0 + \beta_1 \text{ClientTone}_{ij} + \beta_2 \text{ExDraftTone}_j + \beta_3 \text{LnCLWords}_{ij} \\ & + \beta_4 \text{LnCLCount}_j + \beta_5 \text{LnExDraftWords}_j + \beta_6 \text{LnAgendaExDraftDays}_j \\ & + \text{Big 4 FE} + \text{Year FE} + \varepsilon_{ij} \end{aligned} \quad (2a)$$

$$\begin{aligned} \text{Big4Tone}_{ij} = & \beta_0 + \beta_1 \text{AllBig4ClientTone}_j + \beta_2 \text{ExDraftTone}_j + \beta_3 \text{LnCLWords}_{ij} \\ & + \beta_4 \text{LnCLCount}_j + \beta_5 \text{LnExDraftWords}_j + \beta_6 \text{LnAgendaExDraftDays}_j \\ & + \text{Big 4 FE} + \text{Year FE} + \varepsilon_{ij} \end{aligned} \quad (2b)$$

$$\begin{aligned} \text{Big4Tone}_{ij} = & \gamma_0 + \gamma_1 \text{UserTone}_j + \gamma_2 \text{ExDraftTone}_j + \gamma_3 \text{LnCLWords}_{ij} + \gamma_4 \text{LnCLCount}_j \\ & + \gamma_5 \text{LnExDraftWords}_j + \gamma_6 \text{LnAgendaExDraftDays}_j + \text{Big 4 FE} \\ & + \text{Year FE} + \varepsilon_{ij} \end{aligned} \quad (3a)$$

$$\begin{aligned} \text{Big4Tone}_{ij} = & \gamma_0 + \gamma_1 \text{AffectedCAR}_j + \gamma_2 \text{ExDraftTone}_j + \gamma_3 \text{LnCLWords}_{ij} \\ & + \gamma_4 \text{LnCLCount}_j + \gamma_5 \text{LnExDraftWords}_j + \gamma_6 \text{LnAgendaExDraftDays}_j \\ & + \text{Big 4 FE} + \text{Year FE} + \varepsilon_{ij} \end{aligned} \quad (3b)$$

$$\begin{aligned} \text{Big4Tone}_{ij} = & \psi_0 + \psi_1 \text{Work}_j + \psi_2 \text{ClientTone}_{ij} + \psi_3 \text{UserTone}_j + \psi_4 \text{ExDraftTone}_j \\ & + \psi_5 \text{LnCLWords}_{ij} + \psi_6 \text{LnCLCount}_j + \psi_7 \text{LnExDraftWords}_j \\ & + \psi_8 \text{LnAgendaExDraftDays}_j + \text{Big 4 FE} + \text{Year FE} + \varepsilon_{ij} \end{aligned} \quad (4)$$

where  $\text{Big4Tone}_{ij}$  is the tone of Big 4 firm  $i$ 's comment letter submitted in response to exposure draft  $j$ . All variables are defined in Appendix C.

$\text{Work}_j$  is defined at the exposure draft level as  $\text{IGParagraphs}$ , the count of the number paragraphs of implementation guidance the exposure draft would change (i.e., add, amend, or supersede) plus one, weighted by  $\text{Ubiquity}$ , the proportion of Compustat firms

likely to be affected if the exposure draft were finalized and adopted.<sup>18</sup> I weight by *Ubiquity* to capture the total shift in demand for professional services if the proposed changes were finalized and adopted. For example, if Big 4 accounting firms support standards that lead to greater demand for audit and consulting services, as in H1, they are likely to support difficult-to-implement standards only if they affect a sizeable proportion of companies. A highly technical standard that would affect only a small number of companies is inconsistent with the make-work theory. To aid in economic interpretation, and to minimize the effects of noise and positive skewness, I rank this variable and convert it to be on the same scale as other independent variables of interest [-1,1] using the following transformation:  $(2 \times [(\text{rank} - 1) / (N - 1)] - 1)$ .<sup>19</sup> A positive  $\alpha_1$  on *Work* from estimating Model (1) would be consistent with rejecting H1.

*ClientTone<sub>ij</sub>* is the average tone of comment letters across all audit clients of Big 4 firm *i* on exposure draft *j*. A positive  $\beta_1$  on *ClientTone* from Model (2a) would be consistent with rejecting H2, or in other words with Big 4 firms supporting exposure drafts supported by their audit clients. For robustness, and also because Big 4 firms likely view all large preparers as potential customers of their audit and consulting services, I also estimate

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<sup>18</sup> I follow Khan, Li, Rajgopal, and Venkatachalam (2018) to identify which firms are likely to be impacted by exposure draft *j*, except I focus on firms expected to be affected upon adoption, rather than an ex post approach.

<sup>19</sup> I am unable to establish robust criteria for identifying affected firms for 12 exposure drafts in my sample. I rank these exposure drafts by *IGParagraphs* (i.e., without considering *Ubiquity*) and place them at the bottom of the distribution outlined here. Results are slightly weaker if I assign all 12 exposure drafts uniform *Work* values of -1.

Model (2b) after replacing *ClientTone* with *AllBig4ClientTone*, the average tone of comment letters across all Big 4 audit clients, to test H2.<sup>20</sup>

*UserTone<sub>j</sub>* is the average tone of comment letters submitted by all financial statement users and user-related professional organizations in response to exposure draft *j*. I define comment letters as from users when written by an investment firm, a credit rating agency, or an organization representing user interests. I exclude comment letters from banks because bank comment letters generally express a preparer viewpoint. The top commenting users (and number of comment letters written) under my classification scheme were the CFA Institute (28); Blackrock Inc. (17); Fidelity Investments (15); the Investment Company Institute (14); Standard & Poor's (13); and the Investors Technical Advisory Committee (13). A positive  $\gamma_1$  on *UserTone* from Model (3a) would be consistent with rejecting H3, or in other words with Big 4 accounting firms supporting exposure drafts supported by financial statement users.

As an additional test of H3, I also estimate Model (3b) where the independent variable of interest is *AffectedCAR*, the average three-day cumulative abnormal return of firms expected to be affected by exposure draft *j*'s proposed GAAP amendments. Returns are measured over the three-day window around exposure draft issuance and are calculated following Khan et al. (2018). I substitute *AffectedCAR* in the place of *UserTone* in Model (3b) to capture financial statement users' revealed, as opposed to merely stated,

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<sup>20</sup> I use *ClientTone* as my primary variable of interest in Model (2a) because the audit client relationship represents a more demonstrable economic bond and, hence agency relationship, between the Big 4 firm and the preparer, whereas *AllBig4ClientTone* captures only presumed and/or potential economic bonds. However, *ClientTone* and *AllBig4ClientTone* are highly correlated ( $\rho=0.857$ ), suggesting it is unlikely their positions ever significantly differ.

preferences. This avoids a situation wherein some financial statement users may not present their genuine preferences for proprietary or reputation-related reasons. For example, a sell-side analyst using currently-disclosed information in her valuation model may refrain from publicly protesting a FASB proposal to eliminate the disclosure, because such protest would reveal her current use. In order to assess the relative importance of each incentive and provide further evidence on hypotheses H1 through H3, I additionally estimate Model (4), which has the same dependent and control variables as Models (1) through (3b), but includes the independent variables of interest from each of Models (1), (2a), and (3a).

An important research design choice arises in situations where constituents do not comment. For example, there are 92 Big 4 comment letter observations where none of the Big 4 firm's clients commented, and 22 exposure drafts with zero comment letters from users. In such situations, leaving *Tone* empty would eliminate many observations for empirical tests. I thus replace *Tone* with zero, on the rationale that if *Tone* captures comment letter position, which can vary from -1 to 1 (i.e., opposed to supportive), a value of zero represents a neutral position. This approach appears to bias against finding results— inferences from untabulated results of affected tests are stronger if I replace with the sample median or leave empty—but is most justifiable given the construct *Tone* is intended to capture.

The remaining variables in Models (1) through (4) control for factors expected to impact the association between Big 4 position and theorized incentives. *ExDraftTone<sub>j</sub>*, the *Tone* of exposure draft *j*, controls for variation in *Tone* induced by comment letters quoting words or passages from exposure draft *j*; *LnCLWords<sub>ij</sub>* controls for correlation between



document tone and length;  $LnCLCount_j$  controls for overall lobbying intensity on exposure draft  $j$ ;  $LnExDraftWords_j$  controls for correlation between  $Tone$  and exposure draft length; and  $LnAgendaExDraftDays_j$  controls for any correlation between length of time between Big 4 support and the length of time between a project being added to the FASB agenda and exposure draft issuance. Big 4 fixed effects control for time- and exposure draft-invariant characteristics of letters written by each firm. Year fixed effects control for the potential effects of unobservable market-wide phenomena that could impact  $Big4Tone$ . Standard errors are clustered at the exposure draft level.

#### 4.2. Standard Setting Outcomes

To test H4 and H5, I estimate Models (5) through (7) below at the exposure draft level:

$$\begin{aligned} GAAP\Delta_j = & \alpha_0 + \alpha_1 Tone_j + \alpha_2 ExDraftTone_j + \alpha_3 LnCLCount_j \\ & + \alpha_4 LnExDraftWords_j + \alpha_5 LnFSWords_j + \alpha_6 LnAgendaExDraftDays_j \\ & + Year\ FE + \varepsilon_j \end{aligned} \quad (5)$$

$$\begin{aligned} ProjectFail_j = & f( \beta_0 + \beta_1 Tone_j + \beta_2 ExDraftTone_j + \beta_3 LnCLCount_j \\ & + \beta_4 LnExDraftWords_j + \beta_5 LnAgendaExDraftDays_j \\ & + Year\ FE + \varepsilon_j ) \end{aligned} \quad (6)$$

$$\begin{aligned} LnDaystoFS_j = & \gamma_0 + \gamma_1 Tone_j + \gamma_2 ExDraftTone_j + \gamma_3 LnCLCount_j \\ & + \gamma_4 LnExDraftWords_j + \gamma_5 LnFSWords_j + \gamma_6 LnAgendaExDraftDays_j \\ & + Year\ FE + \varepsilon_j \end{aligned} \quad (7)$$

where the independent variable of interest,  $Tone_j$ , is the average  $Tone$  of all comment letters submitted in response to exposure draft  $j$  by an individual constituent group. I estimate each model separately using average  $Tone$  of comment letters across all Big 4 accounting

firms, all preparers, all users, etc. In terms of tests of H4 and H5, statistically significant  $\alpha_1$ ,  $\beta_1$ , or  $\gamma_1$  when using Big 4 *Tone* would be consistent with rejecting H4, or in other words with Big 4 positions influencing accounting standards. Differences between  $\alpha_1$ ,  $\beta_1$ , or  $\gamma_1$  coefficients based on the constituent group in the estimation suggest differential impact on standard setting outcomes based on constituent, and provide evidence for H5.<sup>21</sup>

$GAAP\Delta_j$  measures content change between exposure draft and final standard. It is calculated as one minus the document-pair cosine similarity between the two documents, and ranges from zero to one. Document-pair cosine similarity is increasingly used in accounting, finance, and political science to measure textual differences across documents (e.g., Brown and Tucker 2011; Merkley 2014; Haeder and Yackee 2015; Lee 2016). The implementation of cosine similarity in this study is outlined in Appendix C. Inferences from estimating Model (5) are subject to the caveat that  $GAAP\Delta$  only measures absolute content change, and I am unable to empirically determine the direction of change from exposure draft to final standard. However, given that lobbying is generally negative in nature as constituents challenge changes to the status quo (e.g., Baumgartner et al. 2009; McKay 2012) and that I observe an overall mean negative *Tone* in my sample,  $GAAP\Delta$  varying in response to Big 4 position likely indicates the final standard reverting toward pre-existing GAAP.

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<sup>21</sup> Differences between coefficients on different constituents' *Tone* variables imply differential, but not necessarily marginal, impact. Untabulated results of estimating Models (5) through (7) that include average positions of all constituents result in  $\alpha_1$ ,  $\beta_1$ , and  $\gamma_1$  coefficients equal to zero for all constituents, likely due to correlation in *Tone* across respective constituent groups.

*ProjectFail<sub>j</sub>* is an indicator variable equal to one if a final standard is not issued based on the exposure draft and the project is removed from the FASB technical agenda, and zero otherwise. Issuing a final standard in a timely manner is an indicator of FASB success (Beresford and Van Riper 1992), an observation supported by the prominent discussion of completed projects in Financial Accounting Foundation annual reports (FAF 2015; FAF 2016).<sup>22</sup> Moreover, the FASB typically does not undertake a project without a high likelihood of FASB board consensus and project completion (Miller, Bahnson, and Redding 2016).

*LnDaystoFS<sub>j</sub>* is the natural logarithm of the number of days between exposure draft and final standard issuance for completed FASB projects. Delays in finalizing a standard consume FASB resources and are potentially costly to financial markets in need of financial reporting improvements. Thus, timely project completion is likely expected, absent constituent opposition.

The remaining variables in Models (5) through (7) control for factors expected to impact the relation between *Tone* and the three outcomes. The set of control variables is similar to that used for estimating Models (1) through (4), except I add *LnFSWords<sub>j</sub>* in Models (5) and (7) to control for the relation between final standard length and *Tone*. Year fixed effects are included to control for economic factors that could impact the relationship between lobbying positions and FASB reactions. To avoid potential confounding effects of multiple exposure drafts associated with a single final standard, I estimate Models (5)

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<sup>22</sup> This does not necessarily imply a volume-based approach to standard setting, but rather a motivation to complete projects once initiated and select projects having a high likelihood of completion.

through (7) using only the 71 “first” exposure drafts in a project timeline (see Table 1, Panel A). Results are robust to including all 80 exposure drafts.

## **Chapter 5: Data and Empirical Results**

### **5.1. Data**

#### **5.1.1. Data Sources**

Data used in this study come from FASB exposure drafts, comment letters submitted in response to these exposure drafts, Compustat, CRSP, and AuditAnalytics. I hand match company names from comment letters downloaded from the FASB website to Compustat GVKEY to obtain preparer information from Compustat, CRSP, and AuditAnalytics.

I download the 301 exposure drafts submitted between 2002 and 2016 from the FASB website, and remove title page, summary, background information, and basis for conclusions, leaving only the exposure draft body containing proposed amendments. To avoid using exposure drafts for which Big 4 incentives are less stark, my tests focus on 80 exposure drafts I classify as significant. In the pre-Accounting Standards Codification (ASC) era (i.e., pre-2009), significant exposure drafts are the 37 associated with SFASs. In the ASC era, significant exposure drafts are the 43 not 1) originating with the EITF, 2) originating with the Private Company Council (PCC), 3) proposing changes to the conceptual framework, or 4) proposing technical corrections.

I also download the 17,405 comment letters submitted by FASB constituents in response to these 80 significant exposure drafts. I classify comment letters as written by: academics, Big 4 firms, smaller auditors, consultants, individuals, law firms, for-profit

preparers, not-for-profit preparers, regulators, standard setters, financial statement users, and professional organizations.<sup>23</sup>

To compute *Tone* for each comment letter, I eliminate all words not in the Loughran and McDonald (2014 – LM) dictionary and then count the number of positive and negative words. Positive and negative words are defined using the LM dictionary after contextually modifying it by removing standard- and proposal-specific accounting words that are germane to the applicable document, but are not used in order to convey support or opposition. To eliminate the impact of outliers, I remove 61 comment letters containing less than 25 LM words and trim the sample by eliminating the top and bottom percentile of comment letters by (positive words / negative words). 16,994 comment letters are used in my analyses.

Table 1, Panel A outlines the final sample of exposure drafts and comment letters based on each exposure draft's relation to completed and "failed" FASB projects. Of the 80 exposure drafts in my sample, 73 relate to projects that were ultimately finalized. 66 of these were the first exposure draft of the project, six were second exposure drafts, and one was the third. Seven of the exposure drafts in my sample are associated with five projects that failed, with two exposure drafts from failed projects where the FASB issued two separate exposure drafts.

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<sup>23</sup> For purposes of empirical tests using constituent-level data, I aggregate regulators and standard setters into a single category, as well as academics, professional organizations, consultants, individuals, law firms, and not-for-profit preparers into a single "Other" category.

### 5.1.2. Exposure Draft Characteristics

Table 1, Panel B presents descriptive statistics for regression model variables. All variables are defined in Appendix C. Mean (median) *ExDraftTone* of -0.255 (-0.300) indicates exposure drafts in my sample use more negative words from the LM dictionary than positive words, supporting the need to control for *ExDraftTone* in empirical tests. Mean (median) *CLCount* of 212 (47) shows that while the average exposure draft receives over 200 comment letters, the distribution is skewed due to some projects receiving hundreds of comment letters.<sup>24</sup> Similar skewness is apparent in the length of exposure drafts and final standards. *ExDraftWords* and *FSWords* have mean (median) of 5,899 (2,269) and 6,998 (2,641).

*Work* is uniformly distributed on [-1,1], with mean and median very close to zero. To provide context for construction of *Work*, Appendix D presents the top and bottom ten exposure drafts by value of *Work*, and the Internet Appendix outlines criteria used to identify Compustat firms expected to be affected by each exposure draft used in my analyses. Mean (median) *GAAPΔ*, shown in Panel B of Table 1, of 0.436 (0.400) indicates the mean (median) final accounting standard changed, in terms of words and word counts, from its exposure draft form by 43.6% (40.0%) of total possible change. Mean *AffectedCAR* of 0.032 suggests the average market reaction to exposure draft issuance is quite low at 0.032%, which is consistent with prior literature (Khan et al. 2018). Mean

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<sup>24</sup> For example, “Proposed Accounting Standards Update—Accounting for Financial Instruments and Revisions to the Accounting for Derivative Instruments and Hedging Activities—Financial Instruments (Topic 825) and Derivatives and Hedging (Topic 815)” received 2,971 comment letters. Many of the comment letters were submitted by bank employees representing themselves as users to appear less self-serving (e.g., Hodder and Hopkins 2014).

(median) *AgendaExDraftDays* of 734 (399) indicates that it typically takes the FASB over a year from addition to the technical agenda until exposure draft issuance, with some longer projects right-skewing the distribution. Mean *ProjectFail* of 0.070 reflects that five of the 71 projects in my sample do not lead to a final standard. Mean (median) *DaystoFS* of 506 (296) shows the mean (median) FASB project requires about 17 (10) months to move from exposure draft to final standard.

### 5.1.3. Comment Letter Characteristics

Panel C of Table 1 presents descriptive statistics for the 16,994 comment letters by constituent group. Mean *Tone* of -0.238 suggests the average comment letter has a negative tone. Mean (median) comment letter length is relatively short at 879 (341) words. Big 4 accounting firms are more negative than the average commenter with mean (median) *Tone* of -0.287 (-0.330) and write the longest letters with mean (median) *CLWords* of 2,632 (1,619) words. User and preparer comment letters have the most positive and second most negative positions, with mean (median) *Tone* of -0.199 (-0.258) and -0.319 (-0.368), respectively.

## 5.2. Univariate Correlations

Table 2 presents univariate Pearson (Spearman) correlations. Univariate correlations between *Big4Tone* and *Work*, *ClientTone*, and *UserTone* of 0.131 (0.128), 0.427 (0.391), and 0.351 (0.449) support rejecting H1 through H3. *Big4Tone* is significantly negatively associated with *GAAPΔ*, *ProjectFail*, and *LnDaystoFS*, supporting rejection of H4. Importantly for the supplemental tests discussed in Section 5.3.2, the



Pearson (Spearman) correlation between *Work* and *ClientTone* is negative at -0.144 (-0.177).

### 5.3. Results from Multivariate Tests of Lobbying Position Determinants

#### 5.3.1. Tests of H1 through H3

Tables 3 through 5 present results of estimating Models (1) through (4) to test H1 through H3, respectively. To address concerns about small- and finite-sample biases, these models are estimated using bootstrapped standard errors clustered at the exposure draft level after resampling the data 1,000 times (e.g., Cameron and Miller 2015). Table 3, the coefficient of 0.110 on *Work* is statistically significant ( $p=0.030$ ) and economically meaningful—moving across the interquartile range of *Work* would reflect an increase in *Big4Tone* of 38.3% (33.3%) of mean (median) *Big4Tone*.<sup>25</sup> This suggests Big 4 firms support exposure drafts that would, if adopted, increase the amount of required audit and consulting work, consistent with rejecting H1. This result is consistent with Watts and Zimmerman (1982) and Puro (1984), who show proposals that would increase fees garner auditor support, and suggests this effect extends beyond a limited number of accounting issues.<sup>26</sup>

Column (1) of Table 4 presents results of estimating Model (2a). The coefficient on *ClientTone* is 0.178 ( $p=0.048$ ). This coefficient is also economically significant. An

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<sup>25</sup>  $[ ( 0.494 - -0.506 ) \times 0.110 ] / 0.287 = 0.383$  and  $[ ( 0.494 - -0.506 ) \times 0.110 ] / 0.330 = 0.333$

<sup>26</sup> For robustness, I recalculate *Work* after replacing *IGParagraphs* with *ExDraftWords*, on the rationale that document length is a function of *IGParagraphs* and longer documents also likely increase demand for professional services. *Work* calculated using *IGParagraphs* and *Work* using *ExDraftWords* are positively correlated ( $\rho=0.503$ ). The coefficient from Model (1) on newly defined *Work* is positive, but insignificant ( $p=0.183$ ), suggesting document length measures a similar construct as *Work*, but also that implementation guidance is unique.

increase in *ClientTone* across the interquartile range would represent an increase of 19.4% (16.8%) of mean (median) *Big4Tone*, which supports rejecting H2. As shown in Column (2) of Table 4, results are economically and statistically more significant when I replace *ClientTone* with *AllBig4ClientTone*, or the tone of all audit clients of Big 4 firms. The coefficient of 0.371 ( $p=0.035$ ) implies an interquartile shift would result in an increase in *Big4Tone* of 56.1%. The greater significance when using *Tone* of all large preparers is likely due to greater precision in measuring *Tone* for all preparers, because I measure the latter variable at the exposure draft level and thus have more observations to calculate *Tone*.<sup>27</sup>

Results from testing H2 are consistent with auditor-client agreement in Watts and Zimmerman (1982) and Puro (1984) as well as agreement between large auditors and big business in general, but are inconsistent with results in MacArthur (1988) and McKee et al. (1991). As explained in Section 2.2, conflicts in prior research appear to be caused by use of non-overlapping small samples. The breadth of my sample and research design provide more convincing evidence consistent with rejecting H2.

Table 5 presents results of estimating Models (3a) and (3b). As shown in Column (1) of Table 5, the coefficient of 0.042 on *UserTone* is statistically insignificant ( $p=0.715$ ), suggesting financial statement users' views are not an important determinant of Big 4 positions. However, it could be the case that user positions expressed in comment letters to the FASB are not representative of broader capital market participant views, as user

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<sup>27</sup> In an untabulated test I find *Big4Tone* is not statistically associated with average tone of preparers who are not clients of Big 4 firms.

participation in FASB due process is notoriously low (e.g., Young 2006). For example, only 390 comment letters were submitted over the 80 exposure drafts by users or user groups, and 22 exposure drafts received no user comment letters at all.<sup>28</sup> Such a low rate might be expected for concentrated constituent groups like the Big 4 firms, but may not effectively capture broad capital market positions. As such, I additionally test H3 by estimating Model (3b) using *AffectedCAR*, measured following Khan et al. (2018), to capture the same construct. Khan et al. contend market reactions for firms expected to be affected by FASB due process events adequately capture the market's perception of the FASB's effect on markets. Results, presented in Column (2) of Table 5, mirror those in Column (1), with a statistically insignificant coefficient on *AffectedCAR* of 0.021 ( $p=0.527$ ).<sup>29</sup> Based on these results, I am unable to reject H3.

Results thus far indicate support for rejecting H1 and H2, but not H3. In other words, Big 4 firm positions appear to be associated with work-increasing features of exposure drafts and positions of clients, but not with views of financial statement users. The economic and statistical magnitudes of the two significant associations are similar, and

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<sup>28</sup> Prior research suggests financial statement user participation in standard setting is difficult to identify (e.g., Allen 2014; Hodder and Hopkins 2014).

<sup>29</sup> For robustness, I additionally obtain insignificant positive results when using the three-day CAR for firms that commented on the exposure draft. Use of this variable is based on the rationale that a firm's submitting a comment letter is better evidence that a firm will be impacted by a proposal compared to a methodology based on expected impact using Compustat data. As a final robustness test of the User theory, I use change in analyst forecast errors for affected firms around final standard adoption to measure the change in the usefulness of the information as a result of FASB standard setting. I find similarly insignificant results. However, this test final robustness is potentially biased since it can only be estimated in the sample of exposure drafts that ultimately led to final standards.

suggest each is an important predictor in isolation. However, these results do not provide evidence on the incentives' marginal impacts, suggesting the need for a joint test.

Column (4) of Table 6 presents results of a combined test of the determinants of Big 4 lobbying positions including all three main independent variables of interest. Results of the combined test are shown in Column (4), while individual tests of H1 through H3 are presented in Columns (1) through (3), respectively. Results show that *Work* and *ClientTone* are both statistically more significantly associated with *Big4Tone* when considered jointly ( $p=0.030$  and  $p=0.043$ , respectively), relative to individual tests. This further supports rejecting H1 and H2, and indicates the make-work theory and the client theory of Big 4 firm lobbying are incrementally important to one another. *UserTone* remains an insignificant determinant of Big 4 lobbying position in joint tests.

### **5.3.2. Interaction of Make-work and Client Theories**

Results of the joint test raise questions regarding the interaction, overlap, and ordering of these two non-mutually exclusive motivations. For example, Big 4 support for exposure drafts that increase demand for professional services could be constrained by client opposition. Similarly, the association between Big 4 and client positions could vary based on the exposure draft's work-increasing elements.<sup>30</sup> I test these motivations' interaction by estimating Model (1) after splitting the sample at the median of *ClientTone* and estimating Model (2a) after splitting the sample at the median of *Work*. I also examine the mean of *Big4Tone* in four subsamples defined by these sample medians.

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<sup>30</sup> Other factors, such as regulatory intervention by the SEC or PCAOB, could also constrain Big 4 positions under both theories.

Results are presented in Table 7. The coefficient on *Work* is not significant in the subsample of low client support (Column (1) of Panel A), but is positive and statistically significant ( $p=0.069$ ) in the high support subsample. While the difference between coefficients is not significant ( $p=0.528$ ), it suggests Big 4 firms support exposure drafts that would increase demand for their services only when clients do not oppose them. Results of the second tests in Columns (3) and (4) of Panel A show the coefficient on *ClientTone* is not different across *Work*-defined subsamples, suggesting Big 4 firm support for exposure drafts supported by clients does not differ based on work-increasing provisions. Panel B shows Big 4 support is highest in the cell defined by high *ClientTone* and high *Work*, where the mean *Big4Tone* of -0.025 is significantly more positive than any other cell. The change in *Big4Tone* is greater when moving from low- to high-*ClientTone* (i.e., left to right) than from low- to high-*Work* (i.e., top to bottom), although this difference is insignificant. Overall, results suggest an interactive effect, which appears to be primarily driven by Big 4 firm support for client positions.<sup>31</sup>

#### **5.4. Results from Multivariate Tests of Standard Setting Outcomes**

##### **5.4.1. Tests of H4 and H5—Big 4 Lobbying Positions’ Impact on Standard Setting Outcomes**

Panels A through D of Table 8 present results from estimating different specifications of Models (5) through (7). Similar to the tests of determinants of Big 4

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<sup>31</sup> This inference is strengthened by the untabulated observation that Big 4 firms comment relatively late in the comment period—often on the deadline—suggesting at least the ability, if not the intent, to react to client comments.

lobbying positions, these models are estimated using bootstrapped standard errors after resampling the data 1,000 times.<sup>32</sup> Columns (1) through (7) of each panel present results from running the specification within the constituent groups identified in Panel C of Table 1.

A statistically significant coefficient of -0.729 on *Tone* in Column (1) of Panel A ( $p=0.002$ ) indicates greater levels of support among all FASB constituents is associated with fewer differences between exposure draft and final standard. This result implies a one standard deviation decrease in constituent support is associated with a 0.193 shift in *GAAPΔ* or, since *GAAPΔ* ranges from 0 to 1, a content change of 19.3%. Turning to separate constituencies in Columns (2) through (7), the coefficient on *Tone* is most significant in Column (2) for Big 4 firms. The coefficient of -0.519 ( $p=0.021$ ) on *Tone* suggests a one standard deviation decrease in Big 4 support is associated with a change in content of approximately 16.8%, consistent with rejecting H4. The bottom row of Panel A presents p-values for a test of the difference between *Tone* in each respective column and Big 4 *Tone* in Column (2) to test H5. While *Tone* is most negative for Big 4 firms, it is statistically more negative than *Tone* for users ( $p=0.039$ ), which is moderately consistent with rejecting H5.

Panel B of Table 8 presents results from estimating Model (6) where the dependent variable is *ProjectFail*. The insignificant coefficient on *Tone* in Column (1) suggests

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<sup>32</sup> Because of the low rate of occurrence of FASB projects failing after exposure draft issuance, this bootstrapping procedure in Model (6) leads to random draws where the distribution of *ProjectFail* differs drastically from that of the true sample rate of occurrence. The practical result is that bootstrapping in this specification leads to standard errors tending toward infinity. To address the low rate of occurrence, I perform additional robustness procedures, as discussed below.

overall FASB constituent position is not a factor in project abandonment or continuance. The coefficient on *Tone* is significant, however, for two constituent groups—Big 4 firms, and regulators and standard setters. The coefficient of -6.454 on *Tone* in Column (2) indicates a one standard deviation decrease in Big 4 support for an exposure draft is associated with an increase in log odds of the project failing by a factor of 1.821, supporting rejection of H4. Panel B contains support for rejecting H5 as well, with the coefficient on *Tone* for Big 4 comment letters being more negative than the coefficient for smaller auditors and other constituents.

A potential concern with the Model (6) specification is the low rate of occurrence of FASB projects “failing.” Panel A of Table 1 indicates only five of the 71 first exposure drafts in this sample fail, consistent with the observation in Miller et al. (2016) that “only a few projects have been completely dropped from the agenda.” Logistic regression can underestimate the probability of rare events occurring and can produce biased coefficients. Several bias correction methods have been proposed (e.g., King and Zeng 2001). Firth’s (1993) penalized maximum likelihood method is a general solution that is well suited to small samples. Results of estimating Model (6) using Firth’s penalized MLE procedure, presented in Panel C of Table 8, are consistent with those in Panel B.

The dependent variable *ProjectFail* is inherently related to survival of FASB projects. Thus, another question related to estimating the propensity of FASB projects “failing” is whether logistic or survival models most appropriately capture the factors contributing to abandonment of standard setting initiatives. To address this question, I

additionally estimate a Cox proportional hazard model in the sample of FASB projects.<sup>33</sup> In a model including all Model (6) explanatory variables, the coefficient (hazard ratio) on *Tone* for Big 4 firms is -5.895 (0.0028) and statistically significant at  $p=0.002$ , providing strong corroborating evidence that Big 4 lobbying is associated with standard setting outcomes.<sup>34,35</sup>

However, because estimating survival models requires observing or reliably estimating the timing of exit from the sample, results of survival analyses should be interpreted with some caution. Discussions with FASB staff suggest that projects can be dormant for long periods of time (i.e., effectively removed from FASB agenda) before being formally removed from the FASB Board's technical agenda, and that the agenda removal decision can be determined as much by the extant FASB chairman's penchant for tidiness and order as by more substantive factors. This appears to be the case in my sample—although failed projects' exposure draft dates range from 2003 to 2014, their agenda removal decisions were from 2012 through 2015, and all but one were removed by the same chairman after 2013. Nevertheless, when combined with results from a logistic model and Firth's (1993) penalized MLE model, this evidence persuasively suggests a strong relation between FASB standard setting outcomes and Big 4 lobbying positions.

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<sup>33</sup> The Cox partial likelihood estimator is suitable in this context because it does not require estimates of a baseline hazard function, which I assume to be constant across all projects the FASB adds to its agenda.

<sup>34</sup> I use the exposure draft issuance as the origin date. Results of Cox partial likelihood models are slightly weaker, but still statistically significant when the date at which the project was added to the FASB agenda is used as the origin.

<sup>35</sup> Similar to the other specifications of Model (6), the only other constituent group for which *Tone* is significant is regulators and standard setters, with a coefficient (hazard ratio) of -2.416 (0.089) and  $p=0.046$ .



Panel D of Table 8 presents results of estimating Model (7). The coefficient on *Tone* is significantly negative for all constituent groups except users in Column (5) and other constituents in Column (7). The coefficient on *Tone* for Big 4 firms of -1.299 indicates that a one standard deviation decrease in Big 4 support is associated with a 11.71% <sup>36</sup> longer delay in the FASB issuing a final standard, consistent with rejecting H4. However, and in contrast to the other Panels of Table 8, the coefficient on *Tone* is not most significant for Big 4 firms in this Panel, but rather for preparers, which is inconsistent with rejecting H5. However, the coefficient on *Tone* for Big 4 firms is significantly greater than the coefficient on *Tone* for users in Column (5), which is moderately consistent with H5 with regard to the impact of users in FASB due process.

Evidence in Table 8 is consistent with rejecting H4, and is generally supportive of rejecting H5. In other words, results consistently show that Big 4 positions are significantly associated with standard setting outcomes.<sup>37</sup> However, while Big 4 *Tone* is the most significant in three of the four panels in Table 5, its statistical significance, relative to that of the FASB's other constituent groups, depends on model specification and comparison group. A notable finding from tests of H4 and H5 is that user positions are not significantly associated with any standard setting outcomes I examine. This is potentially surprising, given the FASB's mission to provide decision-useful information. As noted in Section

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<sup>36</sup>  $[(e^{-1.145} - 1) \times 0.322] / 2$ , where 0.322 is the standard deviation of Big 4 *Tone* and I divide by 2 because the variable is measured on [-1,1].

<sup>37</sup> To examine whether one particular Big 4 firm dominates in this regard, I re-perform tests of H4 and H5 at the individual Big 4 firm level. The coefficient on *Tone* of comment letters from Deloitte is greater economically and statistically than the coefficient on *Tone* of comment letters from other auditors in three of the four models estimated (untabulated). However, these differences are not statistically significant at conventional levels. As such, results are inconclusive as to whether one firm dominates in FASB due process.

5.3.5, user participation in standard setting has historically been low. Thus, it is possible that only privately communicated user feedback is incorporated in accounting standards. It is also possible that collective action problems, whereby disparate user incentives lead them to avoid incurring private costs to promote public goods (e.g., Olson 1965), reduce user participation. However, given that *observed* user comment letter lobbying is unassociated with outcomes, this finding is more consistent with disenfranchisement, whereby user participation in standard setting is low *because* their views are not reflected in standard setting outcomes.

## **5.5. Supplemental Analyses**

### **5.5.1. Association between Changes to Implementation Guidance and Audit Fees**

Results of primary analyses suggest Big 4 positions are associated with work-increasing elements of exposure drafts, where this construct is measured using *Work*, defined as *IGParagraphs* weighted by *Ubiquity*. To provide evidence on construct validity, I examine the impact on audit fees of adopting high-*Work* accounting standards by treating accounting standard adoptions as separate events and performing a stacked cohort difference-in-differences analysis (e.g., Bertrand, Duflo, and Mullainathan 2004; Gormley and Matsa 2011).

I perform the difference-in-differences analysis using final standards that were adopted prior to 2014 to ensure I have audit fees for complying firms for two years before and after adoption. Of the 66 final standards in my sample, I eliminate nine for which I am unable to establish robust criteria to determine affected firms (see Appendix D), and an additional nine that were not adopted by 2014, leaving 38 final standards. I then split

this sample at the median of *IGParagraphs*—my definition of a high-*Work* standard. I estimate the effect of adopting high-*Work* standards on audit fees by estimating Model (8):

$$\begin{aligned}
LnAuditFees_{ist} = & \psi_0 + \psi_1 Treated_{is} + \psi_2 Post_{st} + \psi_3 Treated_{is} \times Post_{st} \\
& + \psi_4 LnAssets_{ist} + \psi_5 LnSegments_{ist} + \psi_6 ROA_{-1ist} + \psi_7 Age_{ist} \\
& + \psi_8 SalesGrowth_{ist} + \psi_9 Foreign_{ist} + \psi_{10} CalendarYE_{ist} \\
& + \psi_{11} Opinion_{ist} + \psi_{12} Merger_{ist} + Year-FS FE \\
& + Firm-FS FE + \varepsilon_{ist}
\end{aligned} \tag{8}$$

where  $i$ ,  $s$ , and  $t$  index firm, accounting standard, and adoption period, respectively.

*Treated* is an indicator variable equal to one if firm  $i$  is affected by a high-*Work* standard, and zero otherwise. *Post* is an indicator equal to one if the observation is after adoption of accounting standard  $s$ , and zero otherwise. The interaction of *Treated* and *Post* is the independent variable of interest, where positive  $\psi_3$  indicates higher audit fees after adopting accounting standard  $s$ . Other variables, defined in Appendix C, are included to control for audit fee determinants as in Hogan and Wilkins (2008). Control variables are also interacted with *Post*, but are not presented for brevity.

There are 13,856 *Treated* firms in the sample. I perform the analysis in three samples with three different control groups: 1) firms that are unaffected by standard  $s$  in the same adoption period  $t$  as treated firms ( $N = 113,033$ ), 2) firms adopting low-*Work* standards in their own respective adoption periods ( $N = 17,614$ ), and 3) the combination of 1) and 2) ( $N = 130,647$ ). Following the approach in Bertrand et al. (2004), I collapse time-series variation in audit fees and control variables by taking the average of these variables for the two years before and after adopting standard  $s$  such that the units of

analysis are a single “pre” and “post” observation for each firm-standard observation, or  $2 \times N$  as outlined above.

Similar to other stacked cohort difference-in-difference analyses (see Gormley and Matsa 2011 for a similar design), my formation of treatment and control groups results in *Treated* firms for one accounting standard serving as controls for other standards in the same regression. I include year-standard and firm-standard fixed effects to control for firm- and time-invariant factors, specific to each standard, that could impact the relationship between adoption and fees. I also cluster standard errors by both firm and industry (using Fama and French 49 industries) to account for potential firm- and industry-specific covariance.

Results of the analysis are presented in Panel A of Table 9. Columns (1) through (3) present results from using the first control group, Columns (4) and (5) the results of the smaller control group, and Columns (6) through (9) for the combined control group. I find significantly positive  $\psi_3$  in each specification, suggesting *Work* captures changes in accounting standards that cause a meaningful increase in audit fees.

To provide economic intuition for the audit fee increase, I tabulate a simple two-by-two matrix of average audit fees for treatment and control firms for two years before and after adoption in Panel B of Table 9, using the estimated coefficients from Columns (1), (4), or (7), depending on the sample. As indicated in Column (3), audit fees increase more for treated firms relative to the first control group by \$127,136, or 121.6%. Column (6) shows that although control firms had a higher audit fees in the pre- and post-adoption periods, treated firm audit fees increased by \$39,110 (20.3%) on a relative basis. Columns

(7) through (9) reflect a weighted average of results in the first and second set of columns, and hence lead to similar inferences.

### **5.5.2. Litigation Risk as an Alternative Explanation for Make-work Results**

Results of primary analyses suggest Big 4 lobbying positions are associated with features of exposure drafts that would increase demand for professional services. However, due to the overlap of such exposure draft features and those of rules-based standards that shield firms and auditors from litigation risk (e.g., Schipper 2003; Donelson et al. 2012; Kadous and Mercer 2012), lobbying to reduce risk is a potential alternative explanation.

I perform a supplemental test examining whether exposure to higher levels of ex ante litigation risk leads Big 4 firms to respond differently to higher levels of *Work* in an exposure draft. The rationale for this test is that if higher values of *Work* capture higher levels of rules that shield auditors from litigation risk (as opposed to higher levels of audit and consulting work), then Big 4 firms facing higher levels of ex ante litigation risk should respond more favorably to high-*Work* exposure drafts. I measure the average ex ante litigation risk following Kim and Skinner (2012) for all firms that would be affected by each exposure draft in my sample. I then collapse this measure to the Big 4 comment letter level by computing average ex ante litigation risk across audit clients of each Big 4 firm as of the fiscal year preceding exposure draft issuance. After dividing the sample of Big 4 comment letters at the median of this measure, I re-estimate Model (1). I find *Work* is a stronger predictor of Big 4 support in the low-risk subsample (untabulated), which is the

opposite of what would be expected under risk reduction. The difference in coefficients across subsamples is not significant, however.<sup>38</sup>

### 5.5.3. Coordination Analyses

Prior research provides several reasons Big 4 firms may lobby as a group. Group- or coalition-based lobbying is effective in regulatory contexts when there is clear consensus among group members (Nelson and Yackee 2012) and where resource sharing is beneficial (Hula 1999; Nownes 2006). Big 4 firms likely also have strategic incentives to present united, rather than discordant, views (Hall and Deardorff 2006). Lobbying in a coordinated manner, independent of private incentives, is consistent with Amershi, Demski, and Wolfson's (1982) model of accounting standard setting as a long-term strategic game, where each voting agent may unanimously vote for a second-best view. Coordinated Big 4 firm lobbying is most likely to occur in concert with make-work incentives since client-specific interests preclude consensus.

To test whether work-increasing exposure draft provisions increase unity among Big 4 positions, I re-estimate Model (1) at the exposure draft level after replacing the dependent variable *Big4Tone* with the standard deviation of tone across Big 4 firms for an exposure draft. I find a weakly negative coefficient on *Work* ( $p=0.150$ , untabulated), which

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<sup>38</sup> This inference differs from the conclusions of Allen et al. (2018), who find Big N auditor mentions of reliability are associated with over-time changes in prevailing litigation risk. The difference is likely due to significant research design differences—whereas tests by Allen et al. are designed to detect time-series variation in auditor lobbying for reliability based on own litigation risk, my tests are designed to detect differences in lobbying for work-increasing provisions in the cross-section of exposure drafts based on client risk.

is mildly supportive of greater levels of work leading to more coordination among Big 4 firms.

## **Chapter 6: Conclusion**

Motivated by the considerable participation of Big 4 firms in FASB due process, this study seeks to develop a more complete understanding of the determinants and consequences of their lobbying positions. I acknowledge several limitations. First, in the absence of formal voting or roll call procedures for FASB constituents, I rely on textual features of comment letters to proxy for lobbying positions. Despite the efficiency-related advantages of this approach and my extensive construct validity tests (see Appendix B), I cannot rule out the possibility that this method under- or over-weights certain comment letter characteristics or fails to fully capture lobbying positions.

In addition, this study's reliance on the comment letter phase of FASB due process is based on the rationale that comment letter positions are correlated with the positions FASB constituents promote privately. Inferences are limited if public comment letter positions are orthogonal to privately advocated lobbying views. However, under the mild assumption of correlation between public and private lobbying, it is more likely that this inability to observe Big 4 firms' "quiet" lobbying efforts leads to my underestimating the impact of Big 4 firms in the standard setting process.

Finally, if FASB constituents choose to abstain from the comment letter process altogether, their lobbying positions are not captured in my tests. This limitation does not apply to analyses of Big 4 comment letters, as Big 4 firms commented on virtually every proposal analyzed, but tests using other constituents' comment letter positions may lack power as a result.



Notwithstanding these caveats, this study contributes to an understanding of the political economy of accounting standard development. The evidence indicates that Big 4 lobbying positions are associated with the amount of additional audit and consulting work that is likely to result from adopting proposed standards and with positions of clients, and that Big 4 support for work-increasing proposals is constrained by client opposition. These findings have implications for accounting standard setting because, as I show in consequences tests, Big 4 positions are significantly associated with the amount, timing, and predicted failure of changes from exposure draft to final standard. Given the paucity of research on systematic incentives shaping constituent lobbying positions before the FASB (e.g., Gipper et al. 2013), my study provides novel insights into accounting standard development and are informative to standard setters as they evaluate Big 4 lobbying positions.

Results additionally suggest that lobbying positions of financial statement users are decidedly unrelated to both Big 4 lobbying positions and standard setting outcomes, which is potentially surprising given the FASB's mission of serving users. However, this evidence is consistent with and may provide an explanation for prior research documenting low user participation in FASB agenda setting (Allen 2014), comment letter submission (Tandy and Wilburn 1992; Weetman et al. 1996; Hodder and Hopkins 2014), and overall FASB due process (Young 2006). Specifically, my results suggest users may not participate because their positions are disregarded.

## Tables

**Table 1: Descriptive Statistics**

<i>Panel A: Exposure drafts and comment letters</i>						
					<b>Exposure drafts</b>	<b>Comment letters</b>
First exposure draft of a FASB project resulting in a final standard					66	14,363
Second exposure draft of a project leading to a final standard					6	1,542
Third exposure draft of a project leading to a final standard					1	167
Sample for completed projects					73	16,072
First exposure draft of a failed FASB project					5	549
Second exposure draft of a failed FASB project					2	373
Final sample for all projects					80	16,994
<i>Panel B: Model variables</i>						
	N	Mean	Std. Dev	25%	50%	75%
<i>ExDraftTone<sub>j</sub></i>	80	-0.255	0.424	-0.596	-0.300	0.060
<i>CLCount<sub>j</sub></i>	80	212	750	28	47	102
<i>ExDraftWords<sub>j</sub></i>	80	5,899	10,466	1,069	2,269	5,168
<i>FSWords<sub>j</sub></i>	66	6,998	10,431	1,401	2,641	6,749
<i>Work<sub>j</sub></i>	80	-0.013	0.059	-0.506	-0.013	0.494
<i>ClientTone<sub>ij</sub></i>	316	-0.137	0.264	-0.313	-0.048	0.000
<i>AllBig4ClientTone<sub>j</sub></i>	80	-0.136	0.227	-0.274	-0.063	0.016
<i>UserTone<sub>j</sub></i>	80	-0.156	0.291	-0.335	-0.109	0.000
<i>AffectedCAR<sub>j</sub></i>	68	0.032	0.734	-0.207	0.061	0.352
<i>AgendaExDraftDays<sub>j</sub></i>	80	734	789	161	399	1,184
<i>GAAPΔ<sub>j</sub></i>	66	0.436	0.294	0.200	0.400	0.700
<i>ProjectFail<sub>j</sub></i>	71	0.070	0.258	0.000	0.000	0.000
<i>DaystoFS<sub>j</sub></i>	66	506	591	176	296	514

**Table 1: Descriptive Statistics, continued**

<i>Panel C: Comment letter characteristics</i>							
		N	Mean	Std. Dev	25%	50%	75%
All constituents	<i>Tone</i>	16,994	-0.238	0.446	-0.569	-0.313	0.000
	<i>CLWords</i>	16,994	879	1,399	184	341	993
Big 4	<i>Tone</i>	316	-0.287	0.323	-0.519	-0.330	-0.096
	<i>CLWords</i>	316	2,632	2,692	855	1,619	3,355
Other auditors	<i>Tone</i>	506	-0.365	0.306	-0.596	-0.429	-0.179
	<i>CLWords</i>	506	1,439	1,444	435	957	1,913
Preparers	<i>Tone</i>	5,228	-0.319	0.353	-0.585	-0.368	-0.100
	<i>CLWords</i>	5,228	1,151	1,387	319	640	1,488
Users	<i>Tone</i>	390	-0.199	0.380	-0.462	-0.258	0.000
	<i>CLWords</i>	390	1,678	2,304	465	1,091	1,988
Regulators and standard setters	<i>Tone</i>	272	-0.317	0.309	-0.550	-0.333	-0.148
	<i>CLWords</i>	272	2,163	1,837	902	1,625	2,874
Other	<i>Tone</i>	10,282	-0.188	0.492	-0.561	-0.250	0.143
	<i>CLWords</i>	10,282	595	1,161	148	233	451

Table 1 presents descriptive statistics of variables used in the analyses in this paper. All variables are defined in Appendix C. Panel A outlines the final sample of exposure drafts and comment letters based on each exposure draft's relation to completed and failed FASB projects, Panel B presents descriptive statistics for all variables used in my regression models, and Panel C presents comment letter-specific variables for comment letters received from all constituents on significant FASB projects.

**Table 2: Univariate Correlations**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<i>Big4Tone<sub>ij</sub> (1)</i>		<b>0.603</b>	<b>-0.271</b>	-0.095	<b>-0.157</b>	<b>0.128</b>	<b>0.391</b>	<b>0.503</b>	<b>0.449</b>	<b>0.161</b>	<b>-0.171</b>	<b>-0.328</b>	<b>-0.231</b>	-0.125
<i>ExDraftTone<sub>j</sub> (2)</i>	<b>0.606</b>		-0.044	<b>0.273</b>	-0.129	<b>0.244</b>	<b>0.418</b>	<b>0.528</b>	<b>0.493</b>	<b>0.144</b>	<b>-0.105</b>	-0.100	-0.098	0.199
<i>LnCLCount<sub>j</sub> (3)</i>	<b>-0.256</b>	<b>-0.137</b>		<b>0.482</b>	<b>0.682</b>	<b>0.606</b>	<b>-0.433</b>	<b>-0.470</b>	<b>-0.223</b>	-0.021	<b>0.330</b>	<b>0.312</b>	0.081	<b>0.515</b>
<i>LnExDraftWords<sub>j</sub> (4)</i>	<b>-0.114</b>	<b>0.260</b>	0.002		<b>0.603</b>	<b>0.528</b>	<b>-0.205</b>	<b>-0.205</b>	<b>-0.071</b>	<b>0.132</b>	<b>0.430</b>	0.058	-0.070	<b>0.697</b>
<i>LnFSWords<sub>j</sub> (5)</i>	<b>-0.157</b>	<b>0.015</b>	<b>0.701</b>	<b>0.774</b>		<b>0.499</b>	<b>-0.189</b>	<b>-0.197</b>	<b>-0.297</b>	0.043	<b>0.405</b>	0.025	-	<b>0.641</b>
<i>Work<sub>j</sub> (6)</i>	<b>0.131</b>	<b>0.255</b>	<b>0.536</b>	<b>0.479</b>	<b>0.495</b>		<b>-0.177</b>	<b>-0.115</b>	<b>-0.186</b>	<b>0.192</b>	<b>0.270</b>	-0.048	0.094	0.264
<i>ClientTone<sub>ij</sub> (7)</i>	<b>0.427</b>	<b>0.465</b>	<b>-0.394</b>	<b>-0.123</b>	<b>-0.166</b>	<b>-0.144</b>		<b>0.829</b>	0.096	0.059	<b>-0.214</b>	<b>-0.278</b>	<b>-0.178</b>	0.016
<i>AllBig4ClientTone<sub>j</sub> (8)</i>	<b>0.509</b>	<b>0.543</b>	<b>-0.456</b>	<b>-0.144</b>	<b>-0.197</b>	<b>-0.168</b>	<b>0.857</b>		<b>0.552</b>	0.073	<b>-0.294</b>	<b>-0.268</b>	<b>-0.284</b>	<b>-0.343</b>
<i>UserTone<sub>j</sub> (9)</i>	<b>0.351</b>	<b>0.493</b>	<b>-0.223</b>	<b>-0.071</b>	<b>-0.297</b>	<b>-0.148</b>	<b>0.096</b>	<b>0.556</b>		-0.027	<b>-0.236</b>	0.116	-0.111	<b>-0.220</b>
<i>AffectedCAR (10)</i>	<b>0.125</b>	0.076	-0.063	<b>0.107</b>	0.006	0.067	-0.016	-0.018	<b>-0.142</b>		<b>0.122</b>	<b>-0.344</b>	-0.035	<b>-0.107</b>
<i>LnAgendaExDraftDays<sub>j</sub> (11)</i>	<b>-0.163</b>	-0.113	0.319	<b>0.411</b>	0.392	0.265	-0.243	-0.284	<b>-0.273</b>	0.163		<b>0.100</b>	0.081	<b>0.285</b>
<i>GAAP<math>\Delta_j</math> (12)</i>	<b>-0.297</b>	-0.100	<b>0.312</b>	0.058	0.025	-0.078	<b>-0.278</b>	<b>-0.251</b>	0.116	<b>-0.356</b>	<b>0.080</b>		-	0.131
<i>ProjectFail<sub>j</sub> (13)</i>	<b>-0.224</b>	-0.089	0.055	-0.075	-	0.071	-0.126	-0.187	-0.097	-0.034	0.084	-		-
<i>LnDaystoFS<sub>j</sub> (14)</i>	<b>-0.211</b>	0.199	<b>0.515</b>	<b>0.697</b>	<b>0.641</b>	<b>0.262</b>	0.016	<b>-0.306</b>	<b>-0.220</b>	<b>-0.394</b>	<b>0.445</b>	<b>0.131</b>	-	

Table 2 presents univariate Pearson (Spearman) correlation coefficients below (above) the diagonal for variables used in the main analyses. **Bold** values represent statistical significance at <0.10.

**Table 3: Make-work Theory**

Model:	(1)
Dependent Variable:	<i>Big4Tone</i>
<i>Work</i>	0.110** (2.050)
<i>ExDraftTone</i>	0.384*** (4.429)
<i>LnCLWords</i>	-0.0911*** (-2.974)
<i>LnCLCount</i>	-0.0238 (-0.848)
<i>LnExDraftWords</i>	0.0228 (0.777)
<i>LnAgendaExDraftDays</i>	-0.00635 (-0.235)
Constant	0.0885 (0.316)
Observations	316
R-squared	0.501
Auditor FE	Yes
Year FE	Yes
<p>Table 3 presents results for estimating Model (1) to test H1, where all variables are defined in Appendix C. ***, **, and * represent statistical significance at <math>p &lt; 0.01</math>, <math>p &lt; 0.05</math>, and <math>p &lt; 0.10</math>, respectively. Z-statistics based on bootstrapped standard errors after resampling the data 1,000 times, clustered at the exposure draft level, are presented in parentheses below the coefficient estimates.</p>	

**Table 4: Client Theory**

Column:	(1)	(2)
Model:	(2a)	(2b)
Dependent Variable:	<i>Big4Tone</i>	<i>Big4Tone</i>
<i>ClientTone</i>	0.178** (1.983)	
<i>AllBig4ClientTone</i>		0.371** (2.106)
<i>ExDraftTone</i>	0.371*** (4.087)	0.316*** (3.079)
<i>LnCLWords</i>	-0.0751** (-2.434)	-0.0678** (-2.148)
<i>LnCLCount</i>	0.00547 (0.189)	0.0207 (0.696)
<i>LnExDraftWords</i>	0.0284 (0.908)	0.0224 (0.725)
<i>LnAgendaExDraftDays</i>	-0.00557 (-0.197)	-0.00592 (-0.207)
Constant	-0.203 (-0.752)	-0.263 (-1.051)
Observations	316	316
R-squared	0.494	0.508
Auditor FE	Yes	Yes
Year FE	Yes	Yes

Table 4 presents results from estimating Models (2a) and (2b) to test H2, where all variables are defined in Appendix C. \*\*\*, \*\*, and \* represent statistical significance at  $p < 0.01$ ,  $p < 0.05$ , and  $p < 0.10$ , respectively. Z-statistics based on bootstrapped standard errors after resampling the data 1,000 times, clustered at the exposure draft level, are presented in parentheses below the coefficient estimates.

**Table 5: User Theory**

Column:	(1)	(2)
Model:	(3a)	(3b)
Dependent Variable:	<i>Big4Tone</i>	<i>Big4Tone</i>
<i>UserTone</i>	0.042 (0.341)	
<i>AffectedCAR</i>		0.021 (0.633)
<i>ExDraftTone</i>	0.408*** (4.206)	0.420*** (4.951)
<i>LnCLWords</i>	-0.0815** (-2.527)	-0.0814** (-2.515)
<i>LnCLCount</i>	-0.007 (-0.222)	-0.004 (-0.131)
<i>LnExDraftWords</i>	0.0335 (1.009)	0.0296 (0.923)
<i>LnAgendaExDraftDays</i>	-0.004 (-0.117)	-0.007 (-0.244)
Constant	-0.211 (-0.748)	-0.148 (-0.504)
Observations	316	316
R-squared	0.483	0.485
Auditor FE	Yes	Yes
Year FE	Yes	Yes

Table 5 presents results from estimating Models (3a) and (3b) to test H3, where all variables are defined in Appendix C. \*\*\*, \*\*, and \* represent statistical significance at  $p < 0.01$ ,  $p < 0.05$ , and  $p < 0.10$ , respectively. Z-statistics based on bootstrapped standard errors after resampling the data 1,000 times, clustered at the exposure draft level, are presented in parentheses below the coefficient estimates.

**Table 6: Multivariate Tests of Big 4 Lobbying Position Determinants**

Column:	(1)	(2)	(3)	(4)
Model:	(1a)	(2a)	(3a)	(4)
Dependent variable =	<i>Big4Tone</i>	<i>Big4Tone</i>	<i>Big4Tone</i>	<i>Big4Tone</i>
<i>Work</i>	0.110** (2.050)			0.117*** (2.164)
<i>ClientTone</i>		0.178** (1.983)		0.174** (1.990)
<i>UserTone</i>			0.042 (0.341)	0.043 (0.353)
<i>ExDraftTone</i>	0.384*** (4.429)	0.371*** (4.087)	0.408*** (4.206)	0.319*** (3.064)
<i>LnCLWords</i>	-0.0911*** (-2.974)	-0.0751** (-2.434)	-0.0815** (-2.527)	-0.0828*** (-2.811)
<i>LnCLCount</i>	-0.0238 (-0.848)	0.00547 (0.189)	-0.007 (-0.222)	-0.00988 (-0.341)
<i>LnExDraftWords</i>	0.0228 (0.777)	0.0284 (0.908)	0.0335 (1.009)	0.0159 (0.524)
<i>LnAgendaExDraftDays</i>	-0.00635 (-0.235)	-0.00557 (-0.197)	-0.004 (-0.117)	-0.00534 (-0.192)
Constant	0.0885 (0.316)	-0.203 (-0.752)	-0.211 (-0.748)	0.00818 (0.0317)
Observations	316	316	316	316
R-squared	0.501	0.494	0.483	0.514
Auditor FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Table 6 presents the combined results of estimating Models (1) through (4). Columns (1) through (3) present results from testing H1 through H3. Column (4) presents results of estimating Model (4) where all determinant variables of interest are included. \*\*\*, \*\*, and \* represent statistical significance at  $p < 0.01$ ,  $p < 0.05$ , and  $p < 0.10$ , respectively. Z-statistics based on bootstrapped standard errors after resampling the data 1,000 times, clustered at the exposure draft level, are presented in parentheses below the coefficient estimates.



**Table 7: Joint Tests of Make-work and Client Theories**

<i>Panel A: Models (1) and (2a) in subsamples</i>				
Column:	(1)	(2)	(3)	(4)
Partition:	Low <i>ClientTone</i>	High <i>ClientTone</i>	Low <i>Work</i>	High <i>Work</i>
Dependent variable:	<i>Big4Tone</i>	<i>Big4Tone</i>	<i>Big4Tone</i>	<i>Big4Tone</i>
<i>Work</i>	0.0643 (0.696)	0.167* (1.817)		
<i>ClientTone</i>			0.153 (1.113)	0.172 (1.281)
<i>ExDraftTone</i>	0.460*** (4.606)	0.295** (2.084)	0.272 (1.373)	0.391*** (3.351)
<i>LnCLCount</i>	-0.0282 (-0.693)	0.0185 (0.260)	-0.00224 (-0.0332)	-0.0181 (-0.589)
<i>LnExDraftWords</i>	0.00457 (0.124)	0.0362 (0.689)	0.0356 (0.430)	0.00351 (0.0884)
<i>LnCLWords</i>	0.000809 (0.0263)	-0.144*** (-3.137)	-0.138*** (-2.829)	-0.0266 (-0.727)
<i>LnAgendaExDraftDays</i>	-0.0250 (-0.695)	0.00844 (0.188)	0.00496 (0.0977)	-0.0155 (-0.368)
Constant	-0.0286 (-0.0921)	0.192 (0.462)	0.236 (0.381)	0.0558 (0.202)
Observations	158	158	158	158
R-squared	0.553	0.518	0.470	0.679
Auditor FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
<i>Panel B: Two-by-two of mean Big4Tone</i>				
	(1) Low <i>ClientTone</i>	(2) High <i>ClientTone</i>	(3) <i>Big4Tone diff</i>	
Low <i>Work</i>	-0.372	-0.308	0.064	
High <i>Work</i>	-0.360	-0.025***	0.335	
<i>Big4Tone diff</i>	0.012	0.283	0.271	

Table 7 presents results from interactive tests of H1 and H2. Columns (1) and (2) of Panel A present results from estimating Model (1) separately in subsamples where *ClientTone* is below and above the sample median, respectively. Columns (3) and (4) of Panel A present results from estimating Model (2a) separately in subsamples where *Work* is below and above the sample median, respectively. Panel B presents a simple two-by-two comparison of mean *Big4Tone* in four cells based on the sample medians of *ClientTone* and *Work*. In Panel A, \*\*\*, \*\*, and \* represent statistical significance at  $p < 0.01$ ,  $p < 0.05$ , and  $p < 0.10$ , respectively, with z-statistics based on bootstrapped standard errors after resampling the data 1,000 times, clustered at the exposure draft level, are presented in parentheses below the coefficient estimates. In Panel B, \*\*\* indicates statistical significance at  $p < 0.01$  compared to each of the remaining three cells.

**Table 8: Association between Comment Letter Tone and Standard Setting Outcomes**

<i>Panel A: Average constituent tone and changes from exposure draft to final standard</i>							
Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable:	<i>GAAPΔ</i>	<i>GAAPΔ</i>	<i>GAAPΔ</i>	<i>GAAPΔ</i>	<i>GAAPΔ</i>	<i>GAAPΔ</i>	<i>GAAPΔ</i>
Constituency =	<i>All</i>	<i>Big 4</i>	<i>Other auditors</i>	<i>Preparers</i>	<i>Users</i>	<i>Regulators and Std. Setters</i>	<i>Other</i>
<i>Tone</i>	-0.729*** (-3.026)	-0.519** (-2.315)	-0.397* (-1.791)	-0.434** (-2.118)	0.257 (0.770)	-0.194 (-0.790)	-0.167 (-0.794)
<i>ExDraftTone</i>	0.260* (1.955)	0.198 (1.368)	0.143 (1.013)	0.143 (0.964)	-0.0656 (-0.468)	0.0151 (0.120)	0.0465 (0.297)
<i>LnCLCount</i>	0.0538 (0.997)	0.0571 (1.031)	0.0424 (0.680)	0.0411 (0.705)	0.0741 (1.170)	0.0570 (1.257)	0.0629 (1.133)
<i>LnExDraftWords</i>	0.0621 (0.647)	0.0589 (0.572)	0.0303 (0.292)	0.0455 (0.465)	0.0554 (0.499)	0.0733 (0.769)	0.0653 (0.583)
<i>LnFSWords</i>	-0.0709 (-0.816)	-0.0726 (-0.768)	-0.0517 (-0.544)	-0.0483 (-0.537)	-0.0404 (-0.405)	-0.0723 (-0.825)	-0.0573 (-0.580)
<i>LnAgendaExDraftDays</i>	-0.0235 (-0.438)	-0.0205 (-0.362)	-0.0191 (-0.321)	-0.00998 (-0.165)	-0.0130 (-0.216)	-0.0169 (-0.303)	-0.0316 (-0.519)
Constant	0.356 (1.105)	0.363 (1.051)	0.501 (1.353)	0.333 (0.930)	0.116 (0.249)	0.310 (0.863)	0.293 (0.790)
Observations	66	66	66	66	66	66	66
R-squared	0.322	0.261	0.240	0.243	0.185	0.184	0.186
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
p-value for difference between <i>Tone</i> and Column (2) <i>Tone</i>			0.349	0.549	0.039**	0.862	0.467

**Table 8: Association between Comment Letter Tone and Standard Setting Outcomes, continued**

<i>Panel B: Average constituent tone and project continuation</i>							
Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable:	<i>ProjectFail</i>	<i>ProjectFail</i>	<i>ProjectFail</i>	<i>ProjectFail</i>	<i>ProjectFail</i>	<i>ProjectFail</i>	<i>ProjectFail</i>
Constituent group =	<i>All</i>	<i>Big 4</i>	<i>Other auditors</i>	<i>Preparers</i>	<i>Users</i>	<i>Regulators and Std. Setters</i>	<i>Other</i>
<i>Tone</i>	-2.315 (-1.193)	-6.454*** (-2.775)	-0.634 (-0.444)	-1.491 (-0.813)	-3.564 (-1.078)	-2.710* (-1.852)	1.161 (0.696)
<i>ExDraftTone</i>	0.0725 (0.0767)	1.650* (1.758)	-0.535 (-0.503)	-0.265 (-0.196)	-0.0974 (-0.0879)	-0.459 (-0.463)	-1.199 (-1.048)
<i>LnCLCount</i>	0.343 (1.194)	0.499* (1.778)	0.310 (1.078)	0.272 (1.052)	0.226 (0.689)	0.132 (0.411)	0.350 (1.237)
<i>LnExDraftWords</i>	-0.657 (-1.046)	-1.024 (-1.344)	-0.631 (-1.210)	-0.552 (-1.009)	-0.699 (-1.059)	-0.581 (-1.015)	-0.592 (-1.040)
<i>LnAgendaExDraftDays</i>	0.278 (0.747)	0.509 (1.033)	0.289 (0.837)	0.293 (0.805)	0.209 (0.556)	0.287 (0.728)	0.351 (0.871)
Constant	-1.264 (-0.435)	-1.980 (-0.546)	-1.111 (-0.422)	-1.675 (-0.623)	-0.0310 (-0.0077)	-0.956 (-0.323)	-1.677 (-0.501)
Observations	71	71	71	71	71	71	71
Pseudo R-squared	0.0768	0.197	0.0583	0.0711	0.113	0.0977	0.0690
Year FE	No	No	No	No	No	No	No
p-value for difference between <i>Tone</i> and Column (2) <i>Tone</i>			0.016**	0.644	0.708	0.407	0.041**

**Table 8: Association between Comment Letter Tone and Standard Setting Outcomes, continued**

<i>Panel C: Penalized maximum likelihood estimation (Firth 1993)</i>							
Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable:	<i>ProjectFail</i>	<i>ProjectFail</i>	<i>ProjectFail</i>	<i>ProjectFail</i>	<i>ProjectFail</i>	<i>ProjectFail</i>	<i>ProjectFail</i>
Constituent group =	<i>All</i>	<i>Big 4</i>	<i>Other auditors</i>	<i>Preparers</i>	<i>Users</i>	<i>Regulators and Std. Setters</i>	<i>Other</i>
<i>Tone</i>	-1.790 (-0.746)	-4.843* (-1.760)	-0.344 (-0.175)	-1.090 (-0.611)	-2.607 (-1.177)	-2.070 (-1.077)	0.835 (0.550)
<i>ExDraftTone</i>	0.0716 (0.0526)	1.274 (0.893)	-0.418 (-0.325)	-0.248 (-0.203)	-0.0652 (-0.0563)	-0.303 (-0.284)	-0.828 (-0.676)
<i>LnCLCount</i>	0.312 (0.918)	0.406 (1.114)	0.284 (0.854)	0.246 (0.716)	0.264 (0.672)	0.189 (0.503)	0.313 (1.008)
<i>LnExDraftWords</i>	-0.533 (-0.991)	-0.779 (-1.188)	-0.508 (-0.967)	-0.465 (-0.897)	-0.562 (-1.032)	-0.480 (-0.914)	-0.508 (-1.003)
<i>LnAgendaExDraftDays</i>	0.217 (0.506)	0.363 (0.750)	0.239 (0.575)	0.235 (0.545)	0.165 (0.370)	0.224 (0.513)	0.298 (0.702)
Constant	-1.123 (-0.339)	-1.515 (-0.445)	-1.076 (-0.300)	-1.330 (-0.390)	-0.326 (-0.0896)	-0.985 (-0.285)	-1.378 (-0.394)
Observations	71	71	71	71	71	71	71
Pseudo R-squared	0.861	0.579	0.903	0.870	0.725	0.754	0.844
Year FE	No	No	No	No	No	No	No
p-value for difference between <i>Tone</i> and Column (2) <i>Tone</i>			0.092*	0.611	0.703	0.427	0.118

**Table 8: Association between Comment Letter Tone and Standard Setting Outcomes, continued**

<i>Panel D: Average constituent tone and time from Exposure Draft to Final Standard</i>							
Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable:	<i>LnDays toFS</i>	<i>LnDays toFS</i>	<i>LnDays toFS</i>	<i>LnDays toFS</i>	<i>LnDays toFS</i>	<i>LnDays toFS</i>	<i>LnDays toFS</i>
Constituent group =	<i>All</i>	<i>Big 4</i>	<i>Other auditors</i>	<i>Preparers</i>	<i>Users</i>	<i>Regulators</i>	<i>Other</i>
<i>Tone</i>	-1.648** (-2.439)	-1.299* (-1.909)	-1.031* (-1.780)	-1.585** (-2.467)	-0.252 (-0.334)	-1.060 (-1.477)	-0.722 (-1.404)
<i>ExDraftTone</i>	0.403 (0.944)	0.315 (0.695)	0.194 (0.451)	0.365 (0.902)	-0.188 (-0.468)	-0.0353 (-0.0938)	0.0592 (0.137)
<i>LnCLCount</i>	-0.0858 (-0.471)	-0.0808 (-0.428)	-0.120 (-0.594)	-0.151 (-0.788)	-0.0624 (-0.305)	-0.111 (-0.556)	-0.0742 (-0.393)
<i>LnExDraftWords</i>	-0.129 (-0.379)	-0.134 (-0.383)	-0.207 (-0.608)	-0.169 (-0.496)	-0.172 (-0.469)	-0.0195 (-0.0548)	-0.0842 (-0.234)
<i>LnFSWords</i>	0.458 (1.408)	0.448 (1.316)	0.499 (1.513)	0.505 (1.530)	0.510 (1.457)	0.369 (1.077)	0.464 (1.353)
<i>LnAgendaExDraftDays</i>	0.120 (0.851)	0.126 (0.887)	0.130 (0.900)	0.164 (1.162)	0.122 (0.785)	0.143 (0.967)	0.0766 (0.492)
Constant	3.168*** (2.696)	3.202*** (2.714)	3.568*** (2.772)	3.188*** (2.859)	3.157** (2.075)	3.159*** (2.600)	3.052*** (2.608)
Observations	66	66	66	66	66	66	66
R-squared	0.611	0.597	0.590	0.626	0.556	0.589	0.579
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
p-value for difference between <i>Tone</i> and Column (2) <i>Tone</i>			0.382	0.739	0.089*	0.781	0.351

Table 8 presents results from estimating Models (5) through (7), where all variables are defined in Appendix C. Column (1) presents results when using average *Tone* across all constituents, and Columns (2) through (7) present results when using average *Tone* across the indicated constituent group. \*\*\*, \*\*, and \* represent statistical significance at  $p < 0.01$ ,  $p < 0.05$ , and  $p < 0.10$ , respectively. Z-statistics based on bootstrapped standard errors after resampling the data 1,000 times are presented in parentheses below the coefficient estimates. P-values for coefficient differences are given by  $Z = (\beta_1 - \beta_2) / \sqrt{(SE_{\beta_1}^2 + SE_{\beta_2}^2)}$ .

**Table 9: Change in Audit Fees after Adopting High-Work Standards**

<i>Panel A: Stacked cohort difference-in-differences test</i>								
Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Sample 1: Control group is unaffected firms in same period as Treated firms			Sample 2: Control firms are those affected by low-Work standards in adoption period		Sample 3: Control group consists of control firms from Samples 1 and 2		
<i>Treated</i>	-0.254*** (-11.720)	-0.061*** (-4.919)	-0.010 (-1.077)	-0.170*** (-10.609)		-0.254*** (-11.892)	-0.061*** (-4.884)	-0.010 (-1.072)
<i>Post</i>	0.095*** (16.237)	0.097*** (22.364)	0.182*** (4.020)	0.118*** (7.853)	0.137*** (12.191)	0.095*** (17.614)	0.098*** (21.883)	0.176*** (3.915)
<i>Treated X Post</i>	0.117*** (5.421)	0.124*** (7.254)	0.027*** (3.003)	0.072*** (4.888)	0.093*** (6.262)	0.118*** (5.675)	0.123*** (7.238)	0.027*** (2.988)
<i>LnAssets</i>	0.404*** (18.798)	0.350*** (16.683)	0.330*** (20.720)	0.432*** (29.158)	0.380*** (13.524)	0.405*** (20.816)	0.354*** (16.599)	0.333*** (20.479)
<i>LnSegments</i>	0.327*** (2.778)	0.040*** (3.910)	0.028*** (3.150)	0.415*** (3.864)	0.045*** (3.150)	0.332*** (2.855)	0.039*** (3.866)	0.028*** (3.180)
<i>ROA</i>	-0.002 (-0.210)	0.000 (0.084)	-0.000 (-0.079)	-0.006 (-0.325)	0.001 (0.120)	-0.003 (-0.224)	0.001 (0.153)	-0.000 (-0.018)
<i>FirmAge</i>	0.003*** (3.047)	0.004* (1.951)	-0.000 (-0.045)	0.005*** (5.821)	0.001 (0.471)	0.003*** (3.153)	0.004* (1.799)	-0.000 (-0.049)
<i>SalesGrowth</i>	0.000 (1.037)	0.000*** (4.459)	0.000*** (5.398)	0.000* (1.867)	0.000*** (3.839)	0.000 (1.124)	0.000*** (4.453)	0.000*** (5.764)
<i>Foreign</i>	0.279*** (5.759)	0.038*** (3.762)	0.016 (1.473)	0.308*** (7.731)	0.049*** (3.191)	0.276*** (5.711)	0.037*** (3.491)	0.014 (1.318)
<i>CalendarYE</i>	0.005 (0.114)	0.139** (2.514)	0.134*** (3.034)	-0.032 (-0.717)	0.202*** (3.391)	0.001 (0.021)	0.138** (2.498)	0.134*** (3.004)
<i>NonstandardOpinion</i>	0.242*** (8.499)	0.154*** (8.121)	0.077*** (8.627)	0.107** (2.090)	0.174*** (4.138)	0.247*** (8.703)	0.153*** (7.780)	0.076*** (8.831)
<i>Merger</i>	0.404*** (8.508)	0.037*** (4.261)	0.026*** (2.895)	0.411*** (11.813)	0.024** (2.041)	0.403*** (8.678)	0.036*** (4.096)	0.025*** (2.798)
<i>Constant</i>	10.140*** (64.007)			9.805*** (38.092)		10.125*** (60.961)		
Observations	253,778	253,778	253,778	62,490	62,490	289,006	289,006	289,006
R-squared	0.705	0.971	0.976	0.743	0.975	0.710	0.972	0.976
Year-FS FE	No	No	Yes	No	No	No	No	Yes
Firm-FS FE	No	Yes	Yes	No	Yes	No	Yes	Yes
SE Clustered by firm and industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

**Table 9: Change in Audit Fees after Adopting High-Work Standards**

Panel B: Predicted values from Panel A regressions

Column:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Sample 1: Control group is unaffected firms in same period as Treated firms			Sample 2: Control firms are those affected by low-Work standards in adoption period			Sample 3: Control group consists of control firms from Samples 1 and 2		
	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff
Control	704,716	809,256	104,540	909,845	1,102,411	192,565	728,440	838,106	109,667
Treated	804,037	1,035,712	231,676	804,037	1,035,712	231,676	804,037	1,035,712	231,676
Differences	99,321	226,457	127,136	-105,809	-66,698	39,110	75,597	197,606	122,009

Table 9, Panel A presents results from estimating Model (8), where all variables are defined in Appendix C. Columns (1) through (3) present results when using a sample where the control group consists of unaffected firms in the same period as Treated firms. Columns (4) and (5) present results when using a sample where the control group consists of affected firms in their own respective adoption periods. Columns (6) through (8) present results when using a sample where the control group consists of a combination of the previous two control groups. \*\*\*, \*\*, and \* represent statistical significance at  $p<0.01$ ,  $p<0.05$ , and  $p<0.10$ , respectively. T-statistics based on heteroskedasticity-consistent standard errors clustered by firm and industry are presented in parentheses below the coefficient estimates. Panel B presents a difference-in-difference analysts of audit fees using the predicted values from the regressions in Panel A. Column (3) corresponds to the coefficients from Column (1) of Panel A, Column (6) corresponds to the coefficients from Column (4) of Panel A, and Column (9) corresponds to the coefficients from Column (6) of Panel A.

## Appendix A: Comment Letter Examples

This appendix contains excerpts from two representative Big 4 comment letters: one that is relatively more supportive and one that is relatively more opposed. To illustrate the use of positive and negative words from the Loughran and McDonald (2014) dictionary, **positive words** are denoted with bold, underlined font, and *negative words* with italic, underlined font.

### Excerpt from a relatively more supportive Big 4 comment letter:

From: KPMG LLP

Date: January 14, 2011

Exposure Draft: 1900-100 Proposed Accounting Standards Update, “Transfers and Servicing (Topic 860), Reconsideration of Effective Control for Repurchase Agreements”

We support the Board’s objective and the proposed changes to **improve** the accounting for repurchase agreements by focusing the assessment of effective control on the transferor’s contractual rights and obligations. We believe the proposed amendments... will be helpful in **achieving greater** comparability in the accounting for repurchase agreements... We agree with the Board’s assessment that the **benefits** of the proposed amendments outweigh their cost. As stated above, we believe that one of the main **benefits** is that the removal of the requirement within ASC paragraph 860-10-40-24(b) will result in more consistent accounting for repurchase agreements.

### Excerpt from a relatively more opposed Big 4 comment letter:

From: Deloitte & Touche LLP

Date: August 7, 2008

Exposure draft: 1600-100, Proposed Statement — Disclosure of Certain Loss Contingencies — an amendment of FASB Statements No. 5 and 141(R)

While we support the FASB’s objective to provide investors and users of financial information with more transparent disclosures about loss contingencies, we do not support issuance of the proposed Statement because, among other things, we are *concerned* about an auditor’s ability to audit some of the proposed disclosures. In the body of this comment letter, we discuss *pervasive concerns* related to some of the proposed disclosures that we believe need to be addressed... While we agree that some type of qualitative disclosure is warranted about loss contingencies, including certain remote loss contingencies, we believe that the proposed quantitative disclosures would have limited usefulness, could be *misleading*, and may *unnecessarily* alarm some users of financial statements.



## Appendix B: Validation of Tone as a Measure of Comment Letter Position

This appendix discusses several validation tests performed to confirm that calculated document tone is not inconsistent with the judgments of a human reader.

The first test compares computed *Tone* to human reader evaluations of comment letter position. I hired two research assistants, blind to the objectives of the study, to each read a random sample of 40 Big 4 comment letters and classify them as supportive, ambiguous, or opposed. The correlation coefficients between the research assistants' scales (on a 1, 0, -1 basis) and comment letter *Tone* were 0.635 ( $p < 0.01$ ) and 0.706 ( $p < 0.01$ ).<sup>39</sup> The research assistants agreed on the classification for 26 of the 40 (65%) of the comment letters, with a Cohen's Kappa of 0.475. While there is no consensus on what constitutes statistical significance of Kappa,<sup>40</sup> 0.475 is not high. The agreement percentage and score suggest each coder's evaluation was potentially more consistent with *Tone* than with the other coder's evaluation.<sup>41</sup> High correlation with a human reader but inconsistencies across

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<sup>39</sup> Research assistant A (B) categorized 9 (13) comment letters as supportive, 15 (15) as ambiguous, and 16 (12) as opposed. The 15 comment letters classified as ambiguous were the same in only 8 (53.3%) instances.

<sup>40</sup> Cohen (1960) provides a standard error that can be used to calculate significance, but he also notes significance is not universal and depends on the setting. Several researchers have offered suggestions for interpreting Kappa. Baker et al. (1997) provide benchmarks based on coder fallibility, and suggest a critical Kappa value for three categories (as in my setting) of 0.30, 0.40, and 0.57 for expected coder accuracy levels of 80%, 85%, and 90%, respectively.

<sup>41</sup> The inability of human coders to consistently code policy-related documents is a well-known issue in political science. For example, Mikhaylov, Laver, and Benoit (2011) employ human coders to classify positions of party manifestos from the Comparative Manifesto Project. They find that pairs of human coders achieve agreement scores in the range of 0.3 to 0.5. They conclude that classifying document position using human coders should be implemented with care and using as simple a categorization template as possible, which would be difficult in the context of this study considering the topical differences across the 80 exposure drafts.

human readers supports use of *Tone* to measure position, particularly given the asymmetric costliness of hand coding.

The second validation test compares average *Tone* of comment letters stating “unambiguous” opposition to average *Tone* of all comment letters. Rather than relying on a comparison of *Tone* to a human reader’s assessment of position, this test compares *Tone* to a commenter’s stated position. As discussed in Section 4.1, commenters rarely take unequivocal positions. However, several comment letters contain overt language such as “We do not support the issuance of the exposure draft” or “We do not support the issuance of a final standard.” I searched all Big 4 comment letters for the text strings “do not support” and “cannot support.” 73 of the 316 letters contained one of these phrases at least once. I then read each instance and ruled out 47 cases where the letter used the term(s) to express opposition toward a single aspect of the exposure draft (such as the effective date), but not the document as a whole. This left 26 documents in which the Big 4 firm explicitly stated they did not support issuance of a final standard based on the exposure draft.<sup>42</sup> The average *Tone* of these comment letters is -0.474, which is significantly lower than the sample mean tone of -0.287 ( $p < 0.001$ ).

A third validation test addresses the potential concern that *Tone* could be biased if

- 1) comment letters use words directly from an exposure draft or words that are germane to

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<sup>42</sup> Notably, even comment letters stating ostensibly unequivocal opposition to the issuance of a document contain supportive aspects. For example, Deloitte’s comment letter in response to the exposure draft “Accounting for Financial Guarantee Insurance Contracts, an Interpretation of FASB Statement No. 60” dated June 18, 2007 unambiguously states, “We do not support issuance of this proposed Statement as drafted as a final Standard...” but later supports the exposure draft’s disclosure requirements: “We agree that these disclosures, combined with the disclosures required by Statement 60, should provide users of financial statements with the information they need.” Similar supportive statements on minor issues are found in the majority of these 26 comment letters.

the exposure draft topic; 2) such words are considered positive or negative in the LM dictionary; and 3) such exposure drafts are more likely to increase work, be viewed positively by constituents, or have systematically different outcomes. This test exploits the 11 projects with multiple exposure drafts (see Table 1, Panel A) to examine changes in Big 4 comment letter *Tone* over time using a simple difference-in-differences comparison of *Tone* for first and second exposure drafts in successful and failed projects. If *Tone* captures constituent position on an exposure draft and project outcome is associated with constituent positions, then *Tone* should increase (decrease) over time for successful (failed) multi-exposure draft projects. On the other hand, if exposure draft words or content systematically bias comment letter *Tone*, there should be no association between over-time changes in *Tone* since standard setting topic is held constant.

The results of this test are presented below in Table B1. Column (1) shows mean *Tone* of Big 4 comment letters submitted on the first exposure draft in a multi-exposure draft project are more negative than the sample mean of Big 4 comment letter *Tone* of -0.287. However, Column (2) reflects that successful (failed) projects that ultimately lead (do not lead) to issuance of a final standard receive comment letters with higher (lower) relative *Tone* in the second stage. The difference is not statistically significant ( $p=0.417$ ), likely due to a small N, but the difference-in-differences estimate of *Tone* (-0.173) is greater than half of mean Big 4 comment letter *Tone* over the entire sample. This result is consistent with my tests of standard setting outcomes, and also validates *Tone* as a proxy for position despite the concern about exposure draft content creating bias, since accounting topics are held constant within a project over time.

**Table B1—Over-time changes in *Big4Tone* for successful and failed FASB projects**

	(1)	(2)	(3)
Exposure draft sequence =	First	Second/Third	Difference
Successful projects (N=22, 27)	-0.409	-0.322	0.087
Failed projects (N=8, 8)	-0.367	-0.453	-0.086
	-0.042	-0.131	<b>-0.173</b>

An additional indicator that *Tone* captures the support or opposition of the comment letter is found in the results of my tests of standard setting outcomes. Results from those tests, which are discussed fully in Section 5.4, indicate average constituent *Tone* is associated with changes in standard setting outcomes in predicted directions based on theory. Such a pattern of results would be unlikely if *Tone* were unassociated with comment letter positions.

## Appendix C: Variable Definitions

Variable	Definition
<i>AffectedCAR<sub>j</sub></i>	<p>Average three-day CAR, expressed as a percentage, of firms expected to be affected by exposure draft <i>j</i>'s proposed rules over the three-day window around exposure draft issuance. CARs are calculated following Khan et al. (2018) using the following model:</p> $r_{it} - r_{ft} = \alpha_{it} + \beta_{1i}(r_{mt} - r_{ft}) + \beta_{2i}SMB_t + \beta_{3i}HML_t + \beta_{4i}UMD_t + \varepsilon_{it} \quad (1)$ <p>where <math>r_{it}</math> is the daily return for firm <i>i</i>, <math>r_{ft}</math> is the daily risk-free rate, and <math>r_{mt}</math> is the daily market return at date <i>t</i>. <math>SMB_t</math>, <math>HML_t</math>, and <math>UMD_t</math> are the Fama-French size, book-to-market, and momentum factors at day <i>t</i>, respectively.</p> <p>To calculate daily abnormal returns in year <math>\tau</math>, I exclude all days in the three-day window around any exposure draft issuance date in year <math>\tau-1</math>, and use the remaining days to estimate the parameters in equation (1) for each firm. I require at least 90 observations for the estimation. Next, I use the estimated parameters from year <math>\tau-1</math> to calculate daily abnormal returns (<math>\alpha_{it}</math>) for all days in the three-day window around each event date in year <math>\tau</math>. Finally, I aggregate abnormal returns over the exposure draft issuance window to compute the CAR.</p> <p>To identify affected firms, I read each exposure draft and develop proposal-specific criteria using Compustat variables. Unaffected firms are all those in the Compustat universe not meeting the established criteria. This approach is similar to that used in Khan et al. (2018). Appendix B outlines the criteria used to identify affected firms.</p>
<i>AllBig4ClientTone<sub>j</sub></i>	Average <i>Tone</i> of comment letters written by clients of all Big 4 firm in response to exposure draft <i>j</i> .
<i>Big4Tone<sub>ij</sub></i>	<i>Tone</i> of the comment letter written by Big 4 firm <i>i</i> in response to exposure draft <i>j</i> .
<i>ClientTone<sub>ij</sub></i>	Average <i>Tone</i> of comment letters written by clients of Big 4 firm <i>i</i> in response to exposure draft <i>j</i> .
<i>ExDraftTone<sub>j</sub></i>	<i>Tone</i> of exposure draft <i>j</i> .
<i>GAAP<math>\Delta_j</math></i>	<p>Change from exposure draft to final standard in the content of the standard. Calculated by first removing all introductory and summary content and the basis for conclusions from exposure drafts and final standards, stemming all words using the Porter stemming algorithm, and removing stop words. Then,</p> $GAAP\Delta_j = 1 - Similar_j,$ <p>where <i>Similar<sub>j</sub></i> is the pairwise cosine similarity between each document. Suppose the sample of 71 first exposure drafts and 66 final standards</p>

contains  $n$  unique words. Then each document  $d$  can be represented as an  $n$ -dimension vector:

$$v_d = (w_{d1}, w_{d2}, \dots, w_{dn-1}, w_{dn})$$

where  $w_{di}$ ,  $i \in [1, n]$  is a count of the number of times each word appears in document  $d$ .  $Similar_j$  between documents exposure draft (ED) and final standard (FS) is then defined as:

$$Similar_j = \cos(\theta) = \frac{v_{ED}}{\|v_{ED}\|} \cdot \frac{v_{FS}}{\|v_{FS}\|} = \frac{v_{ED} \cdot v_{FS}}{\|v_{ED}\| \|v_{FS}\|}$$

where  $\theta$  is the angle between vectors  $v_{ED}$  and  $v_{FS}$ ,  $(\cdot)$  is the dot product operator, and  $\|v_d\|$  is the vector length of  $v_d$ .  $Similar_j$  is bounded between 0 and 1, with higher values indicating greater similarity between documents. Brown and Tucker (2011) show that cosine similarity is a decreasing function of the length of the two compared documents. Thus, I adopt an approach comparable to Brown and Tucker (2011) and Lee (2016) and first regress  $Similar$  on the length of the exposure draft and final standard, including squared and cubed terms. I rank the residual from this regression into deciles and divide by 10 for a length-adjusted similarity score. Results are robust to using raw  $\cos(\theta)$ , using the unranked regression residual, and calculating  $\cos(\theta)$  after limiting the dimensionality of vectors  $v_d$  to the most frequently used 25, 50, or 100 words in the document-pair.

<i>LnAgendaExDraftDays</i>	Natural logarithm of the number of days between the FASB adding the project to its technical agenda and exposure draft issuance. (Note that descriptive statistics present this variable unlogged.)
<i>LnCLCount<sub>j</sub></i>	Natural log of the total number of comment letters received in response to exposure draft $j$ . (Note that descriptive statistics present this variable unlogged.)
<i>LnCLWords<sub>ij</sub></i>	Natural log of the number of words in comment letter $i$ received in response to exposure draft $j$ . (Note that descriptive statistics present this variable unlogged.)
<i>LnDaystoFS<sub>j</sub></i>	Natural logarithm of the number of days between exposure draft issuance and final standard issuance for completed FASB projects. (Note that descriptive statistics present this variable unlogged.)
<i>LnExDraftWords<sub>j</sub></i>	Natural log of the number of words in the body of exposure draft $j$ . The body of the exposure draft is obtained by deleting the title page, summary, background information, and basis for conclusions. (Note that descriptive statistics present this variable unlogged.)
<i>LnFSWords<sub>j</sub></i>	Natural log of the number of words in the body of the final standard associated with exposure draft $j$ . The body of the final standard is obtained by deleting the title page, summary, background information, and basis for conclusions. (Note that descriptive statistics present this variable unlogged.)

<i>ProjectFail<sub>j</sub></i>	An indicator equal to one if the exposure draft did not lead to a final standard and the FASB explicitly removed the project from its standard setting agenda, and zero otherwise.
<i>Tone</i>	<p><math display="block">\left[ \left( \text{Number of positive words} - \text{Number of negative words} \right) / \left( \text{Number of positive words} + \text{Number of negative words} \right) \right]</math></p> <p>Positive and negative words are based on the Loughran and McDonald (2014 - LM) Master Dictionary, after first removing the following terms with tonal categorization in the LM Master Dictionary: “disclose,” “disclosed,” “discloses,” “disclosing,” “defined benefit,” “effective date,” “effective control,” “going concern,” “troubled debt restructuring,” and “loss contingency.”</p>
<i>UserTone<sub>j</sub></i>	Average <i>Tone</i> of comment letters written by financial statement users in response to exposure draft <i>j</i> .
<i>Work<sub>j</sub></i>	<p>A ranking of <i>IGParagraphs</i>, the total number of paragraphs affecting (i.e., adding, amending, or superseding) implementation guidance in an exposure draft, weighted by <i>Ubiquity</i>, the proportion of firms expected to be affected by the proposed standard:</p> <p><math display="block">\left( IGParagraphs + 1 \right) \times Ubiquity</math></p> <p>To identify affected firms, I review each exposure draft and develop proposal-specific criteria using Compustat variables. Unaffected firms are all those in the Compustat universe not meeting the established criteria. This approach is similar to that used in Khan et al. (2018). The Internet Appendix outlines the criteria used to identify affected firms. I rank this variable and then convert it to be on the same scale as other independent variables of interest [-1,1] using the transformation <math>\left( 2 \times \left[ \left( \text{rank} - 1 \right) / \left( N - 1 \right) \right] - 1 \right)</math>.</p>

## **Appendix D: Top and Bottom 10 Exposure Drafts for *Work***

The below table shows the exposure drafts with the ten highest and lowest values of *Work*. The exposure drafts can be found on the FASB website (link: <http://bit.ly/FASBEDs>). All criteria are based on Compustat variables and/or the Fama and French 49 industries. The approach for identifying affected firms is similar to that used in Khan et al. (2018) to identify firms affected by final standards, and is outlined in the Internet Appendix for all exposure drafts in my sample.



<b>Exposure Draft</b>	<b>Issuance Date</b>	<b>Title</b>	<b>Final Standard</b>	<b>Ubiquity</b>	<b>IG- Paragraphs</b>	<b>Work</b>
2011-230	1/4/2012	Topic 605—Revenue from Contracts with Customers	ASU 2014-09	88.59%	980	1
2013-270	5/16/2013	Topic 842—Leases	ASU 2016-02	65.50%	527	0.975
1102-100	3/31/2004	Share-Based Payment: an amendment of SFASs 123 and 95	SFAS 123R	68.45%	193	0.924
2015-250	5/12/2015	Topic 606—Identifying Performance Obligations and Licensing	ASU 2016-10	85.86%	97	0.899
1820-100	6/24/2010	Topic 605—Revenue from Contracts with Customers	ASU 2014-09	90.49%	96	0.873
1204-001	6/30/2005	Business Combinations—a replacement of SFAS 141	SFAS 141R	40.87%	136	0.848
2015-270	6/8/2015	Topic 718—Employee Share-Based Payments	ASU 2016-09	79.64%	46	0.823
2015-290	8/31/2015	Topic 606—Principal versus Agent	ASU 2016-08	86.00%	41	0.797
1025-200	9/12/2003	Pensions and Other Postretirement Benefits	SFAS 132R	54.77%	55	0.772
1850-100	8/17/2010	Topic 840—Leases	ASU 2016-02	68.89%	31	0.747
2014-220	7/15/2014	Subtopic 225-20—Eliminating the Concept of Extraordinary Items	ASU 2015-01	-	49	-0.797
2015-320	9/30/2015	Topic 606—Narrow-Scope Improvements and Practical Expedients	ASU 2016-12	-	28	-0.823
1500-200	10/9/2006	Not-for-Profit Organizations: Goodwill and Other Intangible Assets	SFAS 164	-	17	-0.848
2013-320	11/7/2013	Topic 915—Development stage entities	ASU 2014-10	-	1	-0.873
1200-300	12/15/2003	Exchanges of Productive Assets	SFAS 153	-	0	-1
1300-001	4/28/2005	Hierarchy of Generally Accepted Accounting Principles	SFAS 162	-	0	-1
1640-100	10/9/2008	Subsequent Events	SFAS 165	-	0	-1
1690-100	3/27/2009	Hierarchy of Generally Accepted Accounting Principles and ASC	ASU 2009-01	-	0	-1
1760-100	12/29/2009	Topic 855—Amendments to Certain Subsequent Event Requirements	ASU 2010-09	-	0	-1
2013-200	1/7/2013	Topic 825—Scope of a Disclosure for Nonpublic Entities	ASU 2013-03	-	0	-1

## Appendix E: Criteria for Identifying Affected Firms and *Work Variable*

The below table outlines criteria used to identify Compustat firms expected to be affected by each exposure draft used in my analyses. The exposure drafts can be found on the FASB website. All criteria are based on Compustat variables and/or the Fama French 49 industries. The approach is similar to that used in Khan et al. (2018) to identify firms affected by final standards.

Exposure Draft	Issuance Date	Title	Final Standard	Criteria to identify affected firms	Ubiquity	AgendaEx DraftDays
1100-163	5/1/02	Amendment of SFAS 133 on Derivatives and Hedging	SFAS 149	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	1.84%	212
1101-001	10/4/02	Stock-Based Compensation-Transition and Disclosure	SFAS 148	Firms whose stock based compensation (stcko) is greater than zero.	19.74%	64
1063-100	2/20/03	Real Estate Time-Sharing Transactions	SFAS 152	Firms in the real estate industry (FF49 = 47).	0.95%	234
1200-001	6/10/03	Qualifying Special-Purpose Entities and Isolation of Transferred Assets	SFAS 166	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	1.87%	160
1025-200	9/12/03	Pensions and Other Postretirement Benefits	SFAS 132R	Firms whose pension and retirement expense (xpr) is greater than zero.	54.77%	2,049
1200-100	12/15/03	Inventory Costs	SFAS 151	Firms whose inventory balance (invt) is greater than zero.	65.93%	453
1200-400	12/15/03	Accounting Changes and Error Corrections	SFAS 154	Firms whose absolute value of cumulative effect of accounting change (acchg) is greater than zero in any of the previous three years.	15.86%	453
1200-200	12/15/03	Earnings per Share: an amendment of SFAS 128	-	Firms whose absolute value of the difference between reported EPS and diluted EPS (lepsi - epsfi) is greater than zero in any of the previous three years.	40.60%	453
1200-300	12/15/03	Exchanges of Productive Assets	SFAS 153	Unable to establish robust criteria for identifying affected firms.	-	453
1102-100	3/31/04	Share-Based Payment: an amendment of SFASs 123 and 95	SFAS 123R	Firms whose stock option expense (xintopt) is greater than zero.	68.45%	396

<b>Exposure Draft</b>	<b>Issuance Date</b>	<b>Title</b>	<b>Final Standard</b>	<b>Criteria to identify affected firms</b>	<b>Ubiquity</b>	<b>AgendaEx DraftDays</b>
1201-100	6/23/04	Fair Value Measurements	SFAS 157	Firms in the banking industry (FF49 = 45).	7.62%	388
1300-001	4/28/05	Hierarchy of Generally Accepted Accounting Principles	SFAS 162	Unable to establish robust criteria for identifying affected firms.	-	301
1204-001	6/30/05	Business Combinations—a replacement of SFAS 141	SFAS 141R	Firms with either 1) an increase in balance of goodwill (gdwl), 2) acquisition cash effect (aqc) greater than zero, or 3) sales footnote code (sale_fn) of 'AA', 'AB', 'AR', 'AS', 'FA', 'FB', 'FD', 'FE', or 'FF' in any of the previous three years.	40.87%	1,490
1205-001	6/30/05	Consolidated Financial Statements, Including Noncontrolling Interests in Subsidiaries	SFAS 160	Firms whose minority interest (mibt) is greater than zero.	19.34%	1,490
1210-001	8/11/05	Accounting for Certain Hybrid Financial Instruments	SFAS 155	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.38%	588
1220-001	8/11/05	Servicing of Financial Assets: an amendment of SFAS 140	SFAS 156	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.38%	1,805
1225-001	8/11/05	Transfers of Financial Assets: an amendment of SFAS 140	SFAS 166	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.38%	932
1240-001	9/30/05	Earnings per Share—an amendment of SFAS 128	-	Firms whose absolute value of the difference between reported EPS and diluted EPS (epspl - epsfi) is greater than zero in any of the previous three years.	44.48%	1,108
1025-300	3/31/06	Defined Benefit Pension and Other Postretirement Plans	SFAS 158	Firms whose difference between pension projected benefit obligation and pension plan assets (pbpro - pplao) is greater than zero.	21.61%	150
1500-100	10/9/06	Not-for-Profit Mergers and Acquisitions: a replacement of APB 16	SFAS 164	Unable to establish robust criteria for identifying affected firms - exposure draft would apply to nonpublic entities.	-	2,595
1500-200	10/9/06	Not-for-Profit Organizations: Goodwill and Other Intangible Assets	SFAS 164	Unable to establish robust criteria for identifying affected firms - exposure draft would apply to nonpublic entities.	-	2,595

<b>Exposure Draft</b>	<b>Issuance Date</b>	<b>Title</b>	<b>Final Standard</b>	<b>Criteria to identify affected firms</b>	<b>Ubiquity</b>	<b>AgendaEx DraftDays</b>
1510-100	12/8/06	Disclosures about Derivatives and Hedging: an amendment of SFAS 133	SFAS 161	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.26%	647
1530-100	4/18/07	Financial Guarantee Insurance Contracts—an interpretation of SFAS 60	SFAS 163	Firms in the real estate industry (FF49 = 47).	0.86%	686
1600-100	6/5/08	Disclosure of Certain Loss Contingencies—an amendment of SFASs 5 and 141(R)	-	Firms whose absolute value of settlements on the income statement (seta) is greater than zero in any of the previous three years.	23.62%	278
1590-100	6/6/08	Hedging Activities—an amendment of SFAS 133	ASU 2016-01	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.16%	402
1610-100	9/15/08	Transfers of Financial Assets: an amendment of SFAS 140	SFAS 166	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.16%	2,063
1620-100	9/15/08	Amendments to FIN 46R	SFAS 167	Firms in the top quartile of total assets (at) in the banking, construction, machinery, utilities, transportation, retail, and insurance industries (FF49 = 45, 46, 21, 18, 43, 41, 31)	2.16%	198
1650-100	10/9/08	Going Concern	ASU 2014-15	Firms in the lowest quartile of Altman Z-score and not in the banking industry, where Altman Z is calculated as $(1.2*((act-1ct)/at) + 1.4*(re/at) + 3.3*(oiadp/at) + 0.6*((prcc\_f*csho)/lt) + 1.0*(sale/at))$ .	18.49%	69
1640-100	10/9/08	Subsequent Events	SFAS 165	Unable to establish robust criteria for identifying affected firms.	-	69
1690-100	3/27/09	Hierarchy of Generally Accepted Accounting Principles and ASC	ASU 2009-01	Unable to establish robust criteria for identifying affected firms.	-	1,730
1700-100	6/24/09	Disclosures about Quality of Receivables and the Allowance for Credit Losses	ASU 2010-20	Firms in the banking industry (FF49 = 45).	8.61%	905
1720-100	8/28/09	Topic 810—Scope Clarification--Decreases in Ownership of a Subsidiary	ASU 2010-02	Firms whose minority interest (mibt) is greater than zero.	21.52%	239

<b>Exposure Draft</b>	<b>Issuance Date</b>	<b>Title</b>	<b>Final Standard</b>	<b>Criteria to identify affected firms</b>	<b>Ubiquity</b>	<b>AgendaEx DraftDays</b>
1710-100	8/28/09	Topic 820—Fair Value Measurements and Disclosures	ASU 2010-06	Firms in the banking industry (FF49 = 45).	8.67%	180
1730-100	9/15/09	Topic 932—Oil and Gas Reserve Estimation	ASU 2010-03	Firms in the Petroleum and Natural Gas industry (FF49 = 30).	3.93%	226
1740-100	10/13/09	Topic 815—Scope Exception for Embedded Credit Derivatives	ASU 2010-11	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.16%	316
1750-100	12/4/09	Topic 810—Amendments to SFAS 167 for Certain Funds	ASU 2010-10	Firms in the financial trading industry (FF49 = 48).	4.73%	64
1760-100	12/29/09	Topic 855—Amendments to Certain Subsequent Event Requirements	ASU 2010-09	Unable to establish robust criteria for identifying affected firms.	-	515
1790-100	5/26/10	Topic 220—Statement of Comprehensive Income	ASU 2011-05	Firms whose absolute value of other comprehensive income (citotal - ni) is greater than zero in any of the previous three years.	63.82%	602
1810-100	5/26/10	Topics 825 and 815—Derivatives and Hedging	ASU 2016-13	Firms in the top half of total assets (at) in the banking industry (FF49 = 45).	4.29%	541
1820-100	6/24/10	Topic 605—Revenue from Contracts with Customers	ASU 2014-09	Firms whose revenue (sale) is greater than zero.	90.49%	2,976
1830-100	6/29/10	Topic 820—Amendments for Common Fair Value Measurements and Disclosures	ASU 2011-04	Firms in the banking industry (FF49 = 45).	8.57%	271
1840-100	7/20/10	Topic 450—Disclosure of Certain Loss Contingencies	-	Firms whose absolute value of settlements on the income statement (seta) is greater than zero in any of the previous three years.	21.99%	1,053
1850-100	8/17/10	Topic 840—Leases	ASU 2016-02	Firms whose minimum rental commitments in any of the following five years (mrc1, mrc2, mrc3, mrc4, mrc5) are greater than zero.	68.89%	1,490
1860-100	9/1/10	Subtopic 715-80—Disclosure about Participation in a Multiemployer Plan	ASU 2011-09	Firms in industries with greater than 10% union employment in 2009, based on the database of Barry Hirsch and David Macpherson at <a href="http://www.unionstats.com">www.unionstats.com</a> .	10.90%	243

<b>Exposure Draft</b>	<b>Issuance Date</b>	<b>Title</b>	<b>Final Standard</b>	<b>Criteria to identify affected firms</b>	<b>Ubiquity</b>	<b>AgendaEx DraftDays</b>
1880-100	10/12/10	Topic 310—Troubled Debt Restructurings	ASU 2011-02	Firms in the banking industry (FF49 = 45).	8.54%	90
1900-100	11/3/10	Topic 860—Reconsideration of Effective Control for Repos	ASU 2011-03	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.14%	112
2011-100	1/28/11	Topic 210—Offsetting	ASU 2011-11	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.18%	392
2011-180	4/22/11	Topic 350—Testing Goodwill for Impairment	ASU 2011-08	Firms with goodwill greater than zero.	46.71%	135
2011-200	10/21/11	Topic 946—Amendments to Investment Company Guidance	ASU 2013-08	Firms in the financial trading industry (FF49 = 48).	4.90%	1,603
2011-210	10/21/11	Topic 973—Real Estate Investment Company Guidance	-	Firms in the real estate industry (FF49 = 47).	1.00%	658
2011-220	11/3/11	Topic 810—Principal versus Agent Analysis	ASU 2015-02	Firms in the top quartile of total assets (at) in the banking, construction, machinery, utilities, transportation, retail, and insurance industries (FF49 = 45, 46, 21, 18, 43, 41, 31)	5.53%	763
2011-230	1/4/12	Topic 605—Revenue from Contracts with Customers	ASU 2014-09	Firms whose revenue (sale) is greater than zero.	88.59%	3,535
2012-100	1/25/12	Topic 350—Testing Indefinite-Lived Intangible Assets for Impairment	ASU 2012-02	Firms whose ratio of intangible assets other than goodwill over total assets (intano/at) is above the Compustat median.	49.94%	132
2012-200	6/27/12	Topic 825—Disclosures about Liquidity Risk and Interest Rate Risk	-	Firms in the banking industry (FF49 = 45).	8.75%	178
2012-210	7/2/12	Topic 205—The Liquidation Basis of Accounting	ASU 2013-07	Firms in the lowest decile of Altman Z-score and not in the banking industry, where Altman Z is calculated as $(1.2*((act-lct)/at) + 1.4*(re/at) + 3.3*(oiadp/at) + 0.6*((prcc\_f*csho)/lt) + 1.0*(sale/at))$ .	7.10%	1,278
2012-240	8/16/12	Topic 220—Presentation of Items Reclassified Out of AOCI	ASU 2013-02	Firms whose absolute value of other comprehensive income (citotal - ni) is greater than zero in any of the previous three years.	64.18%	1,415

<b>Exposure Draft</b>	<b>Issuance Date</b>	<b>Title</b>	<b>Final Standard</b>	<b>Criteria to identify affected firms</b>	<b>Ubiquity</b>	<b>AgendaEx DraftDays</b>
2012-250	11/26/12	Topic 210—Scope of Disclosures about Offsetting Assets and Liabilities	ASU 2013-01	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.17%	361
2012-260	12/20/12	Subtopic 825-15—Measurement of Credit Losses	ASU 2016-13	Firms in the banking industry (FF49 = 45).	8.65%	1,541
2013-200	1/7/13	Topic 825—Scope of a Disclosure for Nonpublic Entities	ASU 2013-03	Unable to establish robust criteria for identifying affected firms - exposure draft would apply to nonpublic entities.	-	617
2013-210	1/15/13	Topic 860—Effective Control for Transfers with Forward Agreements	ASU 2014-11	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.13%	627
2013-221	2/14/13	Subtopic 825-10—Recognition and Measurement of Financial Assets Liabilities	ASU 2016-01	Firms in the top quartile of total assets (at) in the banking industry (FF49 = 45).	2.13%	1,597
2013-230	4/2/13	Topic 205—Reporting Discontinued Operations	ASU 2014-08	Firms whose absolute value of discontinued operations on the income statement (do) for the following year is greater than zero.	6.15%	1,650
2013-270	5/16/13	Topic 842—Leases	ASU 2016-02	Firms whose minimum rental commitments in any of the following five years (mrc1, mrc2, mrc3, mrc4, mrc5) are greater than zero.	65.50%	2,493
2013-300	6/26/13	Topic 205—Disclosures about Going Concern Presumption	ASU 2014-15	Firms in the lowest quartile of Altman Z-score and not in the banking industry, where Altman Z is calculated as $(1.2*((act-lct)/at) + 1.4*(re/at) + 3.3*(oiadp/at) + 0.6*((prcc\_f*csho)/lt) + 1.0*(sale/at))$ .	17.43%	1,790
2013-320	11/7/13	Topic 915—Development stage entities	ASU 2014-10	Unable to establish robust criteria for identifying affected firms.	-	114
2014-210	7/15/14	Topic 330—Measurement of Inventory	ASU 2015-11	Firms whose inventory balance (invt) is greater than zero.	57.86%	48
2014-220	7/15/14	Subtopic 225-20—Eliminating the Concept of Extraordinary Items	ASU 2015-01	Unable to establish robust criteria for identifying affected firms.	-	48
2014-230	8/20/14	Subtopic 350-40—Fees Paid in a Cloud Computing Arrangement	ASU 2015-05	Firms in the computer software industry (FF49 = 36).	6.61%	114

<b>Exposure Draft</b>	<b>Issuance Date</b>	<b>Title</b>	<b>Final Standard</b>	<b>Criteria to identify affected firms</b>	<b>Ubiquity</b>	<b>AgendaEx DraftDays</b>
2014-250	10/14/14	Subtopic 835-30—Presentation of Debt Issuance Cost	ASU 2015-03	Firms whose total debt to assets ratio ( (dlc + dlnt) / at ) is greater than the Compustat median.	25.10%	62
2014-260	10/14/14	Topic 715—Measurement Date for Defined Benefit Obligation and Plan Assets	ASU 2015-04	Firms whose pension projected benefit obligation (pbpro) or pension plan assets (pplao) is greater than zero.	22.26%	62
2014-270	12/4/14	Topic 946—Disclosures about Investments in Other Investment Companies	-	Firms in the financial trading industry (FF49 = 48).	5.25%	827
2015-200	1/22/15	Topic 740—Intra-Entity Asset Transfers and Classification of Deferred Taxes	ASU 2015-17	Firms whose ratio of current deferred tax assets to total net deferred tax assets (txdbca / txndba) or ratio of current deferred tax liability to total net deferred tax liability (txdbcl / txndbl) is greater than the Compustat median.	14.47%	162
2015-230	4/22/15	Topics 958 and 954—Financial Statements of Not-for-Profit Entities	ASU 2016-14	Unable to establish robust criteria for identifying affected firms - exposure draft would apply to nonpublic entities.	-	1,260
2015-250	5/12/15	Topic 606—Identifying Performance Obligations and Licensing	ASU 2016-10	Firms whose revenue (sale) is greater than zero.	85.86%	83
2015-260	5/21/15	Topic 805—Measurement-Period Adjustments	ASU 2015-16	Firms with either 1) an increase in balance of goodwill (gdwl), 2) acquisition cash effect (aqc) greater than zero, or 3) sales footnote code (sale_fn) of 'AA', 'AB', 'AR', 'AS', 'FA', 'FB', 'FD', 'FE', or 'FF' in any of the previous three years.	33.77%	64
2015-280	6/5/15	Topic 323—Equity Method of Accounting	ASU 2016-07	Firms whose equity income from investees in earnings (esub) is greater than zero.	13.31%	79



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